

GANDHARA UNIVERSITY

SARDAR BEGUM DENTAL COLLEGE

FINAL YEAR BDS 2023-2024

DEPARTMENT OF MEDICAL EDUCATION | SARDAR BEGUM DENTAL
COLLEGE | GANDHARA UNIVERSITY

FROM THE DESK OF PRINCIPAL

Health is a fast-evolving field and with new technologies taking over the traditionally man-dominated fields like radiology and robotic surgical suites assisted by Artificial Intelligence and learning are taking new dimensions with the help of Augmented Reality, we are indeed living in challenging times. Today's student of Medicine and Dentistry will be in the field a decade from now, up against a disease burden that is as varied as the next strain of the Covid-19 Virus and as complicated as the genetic characteristic of Oral Cancer, the largest cancer amongst both genders in Pakistan and at the same time as unpredictable as the recent Covid-19 Pandemic.

It is therefore imperative that our curricula of the Medical and Dental Colleges be in tandem with the changing times with the ability to evolve with time, measuring up to the challenges thrown at the field of healing from the Ever-evolving diseases.

These Student Guidebooks are reviewed every year with the same concept in mind that our future Physician and Dental Surgeon be ready for the challenges that lie ahead.

In the end, I give you the same prayer as is mentioned in the Quran



Prof. Shaheed Iqbal

BDS, MDS

Oral & Maxillofacial Surgery

Principal Sardar Begum Dental College

Gandhara University,

Peshawar.

Welcome

We extend a warm and enthusiastic welcome as you embark on the final year of your BDS journey! This is an exceptional time for each and every one of you, as it represents the culmination of years of hard work, dedication, and passion for dentistry.

This final year will present you with a multitude of challenges, but it is through these challenges that you will grow and thrive. You will encounter a diverse range of dental cases, each presenting its own unique complexities and intricacies. Embrace these cases with confidence, as they will test your diagnostic abilities, treatment planning skills, and critical thinking capabilities.

In addition to refining your clinical skills, this year will also provide you with invaluable experiences in patient management. You will have the opportunity to engage with patients from all walks of life, ensuring their comfort, providing empathetic care, and delivering comprehensive treatment. Patient management skills are essential to becoming a well-rounded dental professional, and this year will be instrumental in developing these crucial abilities.

While your studies and clinical practice will demand your utmost attention, it is vital to prioritize well-being. Take time for self care, maintain a healthy work life balance and seek support when needed. Your physical and mental well being are integral to your success as a dental professional

Our mission is to provide all educational opportunities to our students. Therefore, on completion of the BDS program graduate will possess an appropriate foundation of knowledge, skills, and attitudes to be well prepared to practice safely and effectively

As a director DME I will be meeting with the facilitators to receive the feedback and will try to resolve any difficulties or problems faced during the block. Please do not hesitate to contact DME for any academic help. I wish you an enjoyable and learning experience with block 10.

Director DME: Dr. Marina Khan



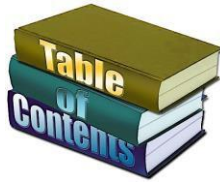


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MODULE TEAM

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<u>DEPARTMENT OF OPERATIVE DENTISTRY</u>	Prof. Dr. Shakeel Khattak Prof Dr. Yasir Khattak Assist Prof Dr. Syed Junaid Dr. Asma Dr. Sajida
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<u>DEPARTMENT OF MEDICAL EDUCATION</u>	Assistant Prof Dr. Marina Khan Assistant Prof Dr. Syed Muhammad Junaid Dr. Aalia Zaib

DEPARTMENT OF MEDICAL EDUCATION

High-quality medical /dental education is a vital prerequisite for high-quality patient care. Dental education's aim is to supply society with a knowledgeable, skilled, and up-to-date cadre of professionals who put patient care above self-interest, along with developing their expertise over the course of a lifelong career.

The department of Dental Education has expanded beyond the classroom all around the world and quality patient care is learned by the bedside teaching and with the practical introduction of clinical cases in preclinical years. The Dental Education department ensures that the educational content synchronizes with the learning strategies, the assessment tools and provides effective feedback to enhance the learning process. The department of Dental Education at Sardar Begum Dental College is interested in raising the standards of the teaching by continuously developing a pool of trained faculty members. For this purpose, interactive sessions and hands-on workshops are constantly designed, focusing on current and effective modes of evidence-based teaching and assessment tools. It fosters flexible and a learner-centered approach during teaching. Self-reflection and critique of teaching techniques are also vital in propelling an institute towards excellence. Our Dental Education department aims to achieve that and more.



DEPARTMENT OF ORAL & MAXILLOFACIAL SURGERY

Welcome to the oral and maxillofacial surgery department, an integral part of your final year BDS clerkship experience! This department plays a vital role in the comprehensive field of dentistry, focusing on the diagnosis and treatment of various diseases, injuries, and deformities of the face, jaws, mouth, and associated structures.

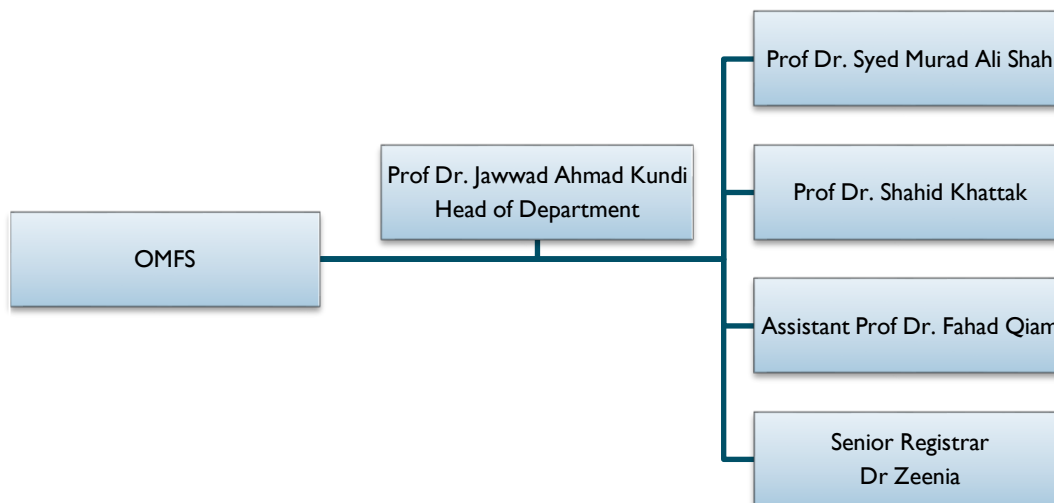
Oral and maxillofacial surgery is a specialized branch that requires a deep understanding of both dentistry and medicine. As you embark on this journey, you will witness the remarkable combination of surgical expertise, dental knowledge, and compassionate patient care.

The primary objective of the oral and maxillofacial surgery department is to equip you with the necessary skills and knowledge to manage a wide range of oral and maxillofacial conditions. Throughout your clerkship, you will have the opportunity to observe, assist, and, in some cases, even perform procedures under the guidance of experienced surgeons.

The oral and maxillofacial surgery department is a multidisciplinary field, closely collaborating with other departments such as prosthodontics, periodontics, orthodontics, and radiology. This collaborative approach ensures a comprehensive and holistic treatment plan for patients, addressing not only their oral and maxillofacial concerns but also considering their overall well-being.

During your time in this department, you will also learn the importance of effective communication and patient management skills. You will witness how oral and maxillofacial surgeons interact with patients, provide pre- and post-operative care, and educate individuals about their treatment options. This aspect of your clerkship will enable you to develop a patient-centered approach and enhance your ability to address their concerns and expectations.

We hope that your time in the oral and maxillofacial surgery department will be enriching and transformative, as you acquire valuable clinical skills, broaden your knowledge base and develop a profound appreciation for the intricacies of this specialized field. Embrace the learning opportunities, engage with experienced faculty, and seize every moment to refine your skills as future dental practitioner

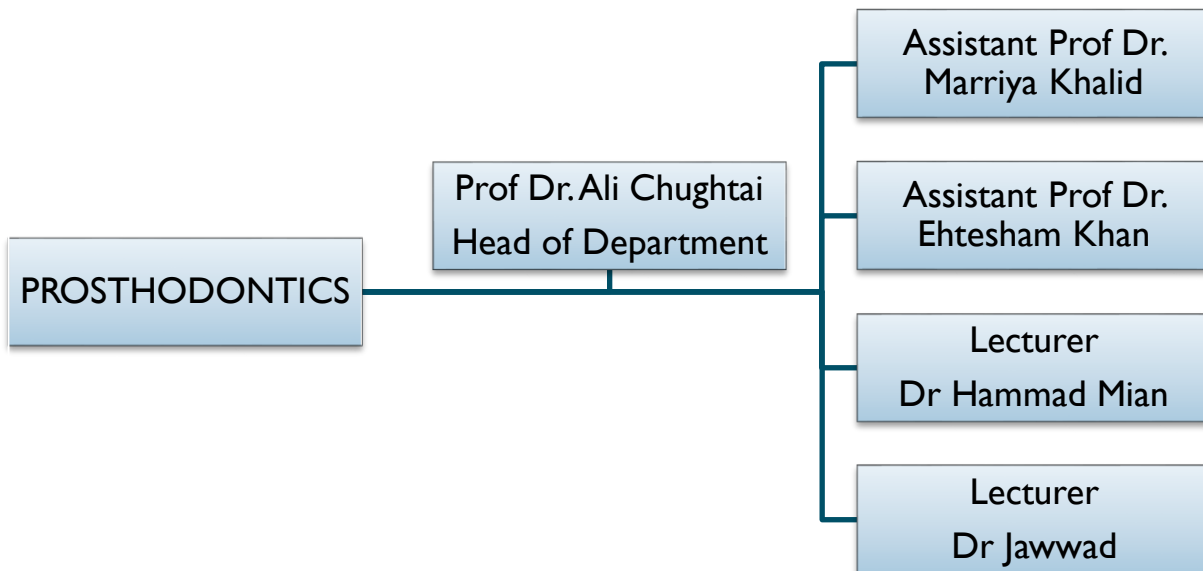


DEPARTMENT OF PROSTHODONTICS

Prosthetic dentistry is the branch of dentistry pertaining to the restoration and maintenance of oral functions, comfort, appearance and health of the patient by restoration of teeth and/or replacement of the missing structures with removable and fixed dental prosthesis. It also encompasses the treatment of lost maxillofacial structures as well as management of patients with implant prosthesis. An understanding of the choice of material and technique is crucial in delivering a high standard of prosthetic care.

It is imperative for the student to have knowledge regarding instruments, handling of the patient, clinical and laboratory procedures. It will prepare the students to work independently as competent dental health professionals by imparting basic prosthetic care.

Students will be given academic and clinical training experience of prosthetic clinical procedures pertaining to removable prosthodontics. The knowledge will be built on the previous background understanding of dental materials and laboratory procedures. Fixed Prosthodontics will be taught on simulators to train them to work on live patients in internship. However, teaching of Implantology and Maxillofacial Prosthodontics will be limited to basic clinical principles and techniques



DEPARTMENT OF ORTHODONTICS

Welcome to the Orthodontic Department, an exciting part of your final year BDS clerkship experience! This department focuses on the diagnosis, prevention, and treatment of malocclusions and irregularities in dental and facial structures. Orthodontics plays a vital role in enhancing the aesthetics and functionality of the dentition.

During your clerkship, you will explore the fascinating world of orthodontics, learning about the principles, techniques, and appliances used to correct dental and skeletal discrepancies. The Orthodontic Department aims to equip you with a comprehensive understanding of orthodontic diagnosis, treatment planning, and the implementation of various orthodontic interventions.

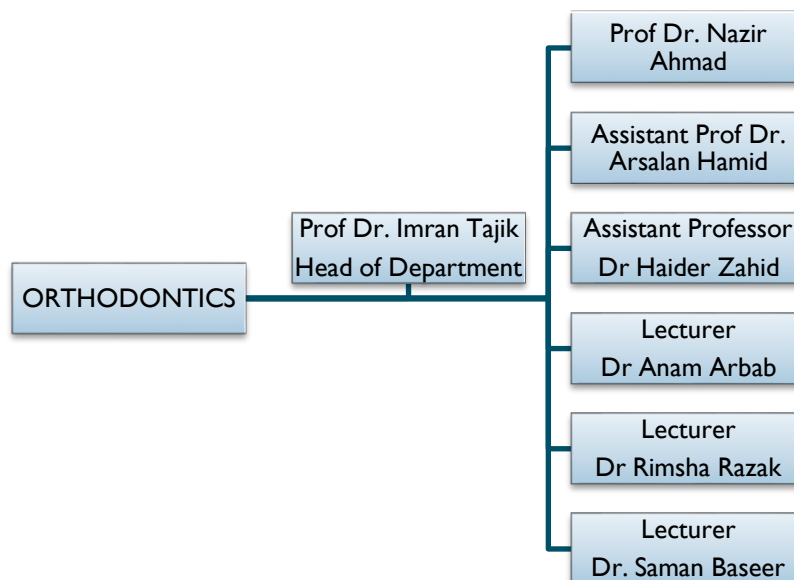
Orthodontics involves the management of various conditions, including crowded teeth, protruding or retruded jaws, malocclusions, and jaw asymmetry. You will have the opportunity to observe and actively participate in the assessment, treatment planning, and placement of orthodontic appliances such as braces, aligners, and functional appliances.

The primary goal of the Orthodontic Department is to provide you with the knowledge and skills necessary to diagnose and manage malocclusions effectively. You will learn about the different orthodontic techniques and treatment modalities, including fixed orthodontic appliances, removable appliances, and interceptive orthodontics in growing patients.

Throughout your time in this department, you will witness the importance of meticulous records, careful treatment planning, and the monitoring of patients' progress. You will gain insights into the assessment of facial and dental aesthetics, occlusion, and the harmonious relationship between the jaws.

Orthodontics is a dynamic and patient-centered field that requires effective communication and empathy. You will observe how orthodontists establish rapport with patients, understand their concerns, and educate them about the orthodontic process. This aspect of your clerkship will enhance your ability to provide personalized care and ensure that patients are active participants in their treatment journey.

The Orthodontic Department also emphasizes the integration of orthodontic care with other dental disciplines. You will witness how orthodontists collaborate with departments such as prosthodontics, periodontics, oral and maxillofacial surgery, and pediatric dentistry to provide comprehensive and multidisciplinary treatment for complex cases.



DEPARTMENT OF OPERATIVE DENTISTRY

Welcome to the Operative Dentistry Department, an essential component of your final year BDS. *This department focuses on the diagnosis, prevention, and treatment of dental caries and other conditions affecting the teeth.* Operative dentistry plays a crucial role in restoring and preserving the functionality and aesthetics of the dentition.

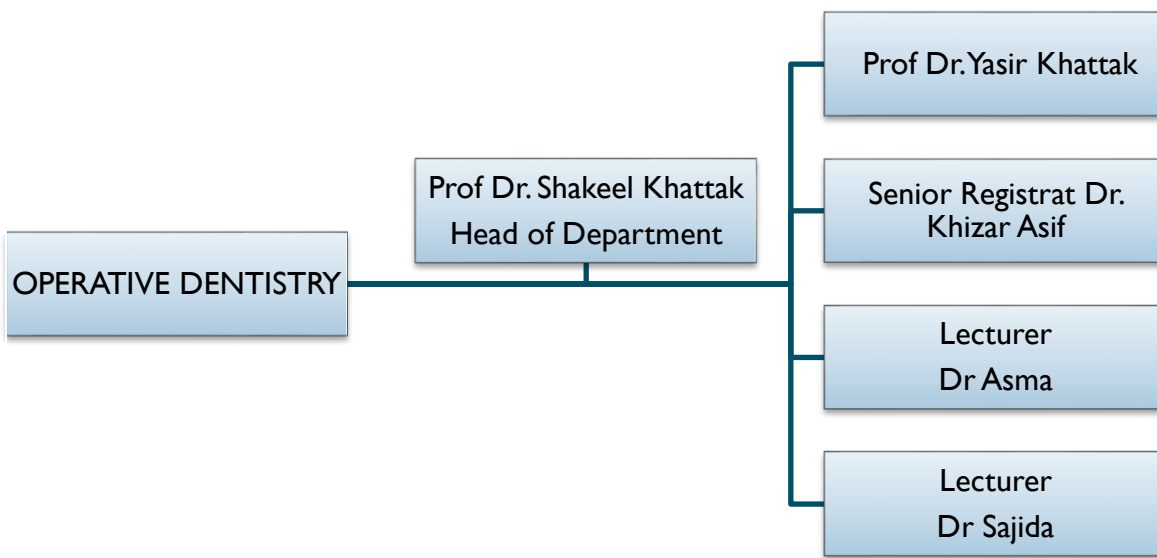
Throughout your clerkship, you will delve into the intricacies of dental restorations, learning the principles, techniques, and materials involved in the art and science of operative dentistry. The Operative Dentistry Department aims to provide you with a comprehensive understanding of the fundamental concepts and practical skills necessary to deliver high-quality dental care.

Operative dentistry encompasses a wide range of procedures, including cavity preparation, restoration placement, direct and indirect restorations, and esthetic dentistry. You will have the opportunity to observe and actively participate in various aspects of operative dentistry, gaining hands-on experience in the use of dental instruments, materials, and modern technologies.

The primary objective of the Operative Dentistry Department is to equip you with the knowledge and skills required to assess and treat dental caries effectively. You will learn how to identify carious lesions, formulate treatment plans, and implement conservative and minimally invasive approaches to restore tooth structure.

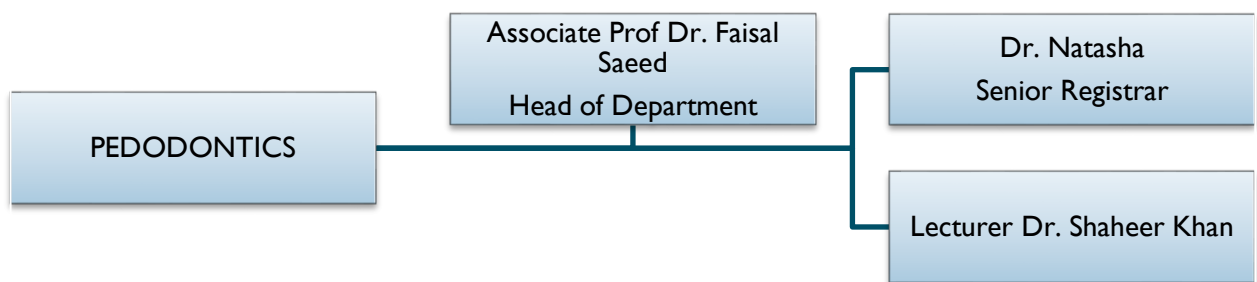
During your time in this department, you will witness the importance of attention to detail, precision, and the preservation of healthy tooth structure. You will learn about different restorative materials, adhesive techniques, and the use of dental technologies

Effective communication and patient management skills are integral to operative dentistry. You will witness how operative dentists establish trust, educate patients about oral health, and address their concerns and expectations. Developing these skills will enable you to provide comprehensive care and ensure patient satisfaction.



DEPARTMENT OF PEDODONTICS

Pediatric dentistry a specialized branch of dentistry is dedicated to the oral health and well being of children from infancy through adolescence. This study guide introduces the fundamental concepts, principles and practice of pediatric dentistry, equipping you with essential knowledge to provide effective dental care to young patients. It covers topic ranging from child psychology and behavior management to preventive dentistry and ethical considerations , ensuring a comprehensive understanding of this critical field. Explore this guide to embarks on your journey into the world of pediatric dentistry and contribute to the lifelong oral health of children



LIST OF ABBREVIATIONS

DME	Department of Medical Education
LGIS	Large Group Interactive Session
SGD	Small Group Discussion
SDL	Self-Directed Learning
DSL	Directed Self Learning
MCQ	Multiple Choice Question
SAQ	Short Answer Question
OSPE	Objective Structured Practical Exam

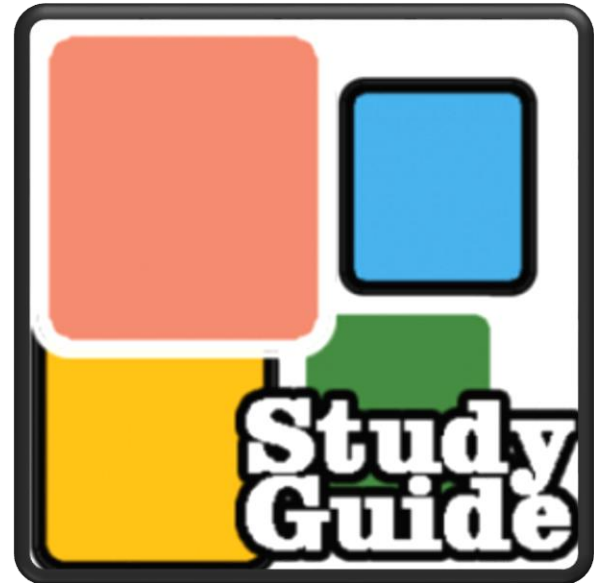
STUDY GUIDE:

This study guidebook was designed by combining the efforts of all topics throughout the year to give dentistry students at SBDC a resource material that highlights significant components of the curriculum. By providing students control over their learning, the study guide aims to promote self-regulated lifelong learning.

In regard to the course content, the study guide provides an overview of the anticipated course outcomes and objectives. The assessment approach is also customized to the intuitional strategy.

A successful curriculum has a significant impact on the final product, as well as on society as a whole. This study guide was carefully designed with the PMC curriculum and rules in mind, and Gandhara University stakeholders and faculty members worked hard to personalize it to the needs of students. They are further working to build, implement, and exercise a well-built curriculum in light of changing demographic needs and disease prevalence in our society. Throughout the construction of the study guide, students' feedback was received and included. Curriculum is a living, dynamic entity that is constantly changing. With each passing day, we hope to improve it. This selfless effort on the part of the entire faculty serves as a beacon for our wonderful students.

Each module in this block has been created to cater the gap between basic and clinical subjects through pre-clinical learning. The block is divided into two modules in which the students are exposed to a variety of basic and clinical subjects. The integrated curriculum is enforced through interactive lectures, small group discussion, community outreach programs along with rotations at preclinical laboratory. The course content pertinent to each module will be addressed in problem-based scenarios and student will work collaboratively towards its solution..



AIMS OF THE STUDY GUIDE

It is an aid to:

- Inform students how student learning program of the BLOCK-wise module has been organized
- Help students organize and manage their studies throughout the module
- Guide students on assessment methods, rules, and regulations
- Communicates information on organization and management of the module. This will help the student to contact the right person in case of difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills and demonstration, tutorial that will be implemented to achieve the module objectives.
- Provides a list of learning resources such as books, computer assisted learning programs, web- links, and journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous and block examinations on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's achievement of objectives.
- Focuses on information pertaining to examination policy, rules, and regulations.



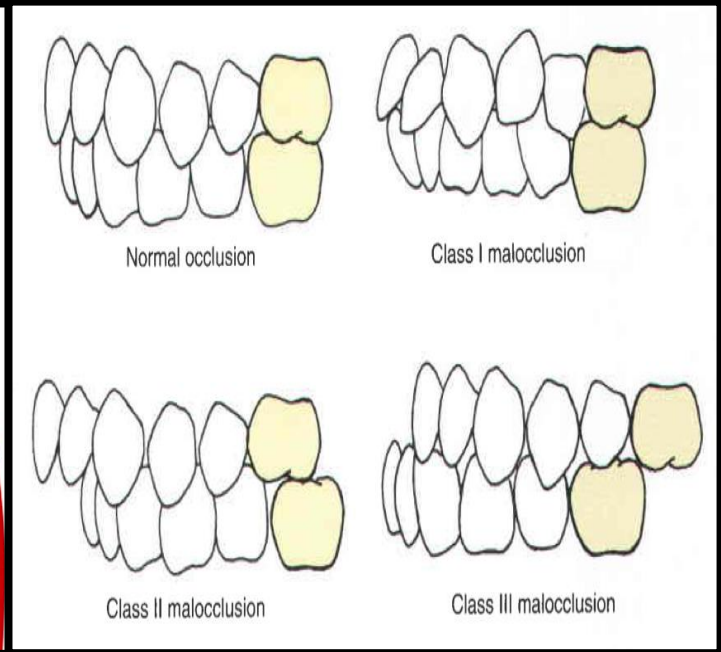
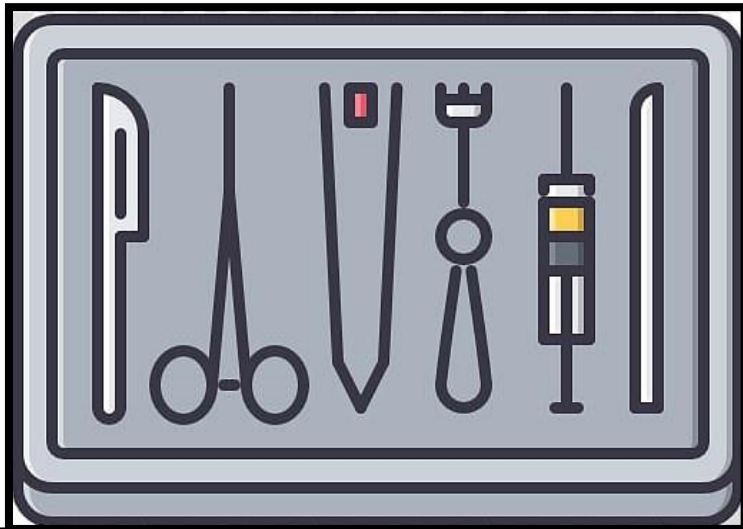
ORGANIZATION OF MODULAR CURRICULUM

FINAL YEAR BDS

Block-10			Block-11			Block-12			
<u>Module</u> <u>19</u> Foundation	<u>Module</u> <u>20</u> Basic Principles of clinical dentistry	Exam Block 10	<u>Module</u> <u>21</u> Oro-facial Pathologies	<u>Module</u> <u>22</u> Management of oro-facial pathologies	Exam Block I	<u>Module</u> <u>23</u> Dento-facial deformities	<u>Module</u> <u>24</u> Advanced Dento-facial procedures	Exam Block 12	Final Exam

BLOCK 10

FOUNDATION & BASIC PRINCIPLES



LEARNING METHODOLOGIES

The following teaching / learning methods are used to promote better understanding:

- Large Group Interactive Lectures
- Small Group Discussion
- Practical
- Skills session
- E-Learning
- Self-Directed Learning

LARGE GROUP INTERACTIVE LECTURES (LGIS)



In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients'

Case- Based Discussions

Case-Based Discussion is a strategy in which learning is focused around a clinical scenario. List of questions is developed regarding the case under discussion and students are encouraged to discuss their ideas and answer the questions applying relevant basic or clinical knowledge acquired during the course. Usually, common clinical cases are selected for discussions.



Clinical Rotations

Students are assigned 2 months of rotation in department of Oral & Maxillofacial Surgery, Prosthodontics, Operative Dentistry, Orthodontics and Pedodontics. Students are directed to observe patients in orientation week and then perform clinical procedure under supervision of seniors. Students are encouraged to assist



SELF DIRECTED LEARNING SDL:

Students assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers, and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

E-LEARNING:

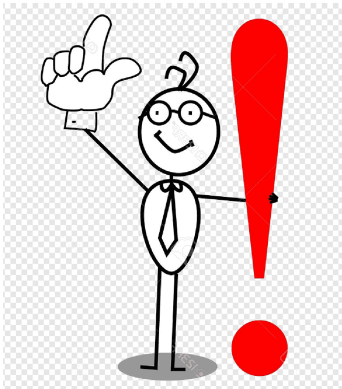
E-Learning is a strategy by which learning occurs through the utilization of electronic media, typically the Internet. The basic aspects of medical professionalism and ethics will be addressed through an e-learning course.



RULES AND REGULATIONS

We will be making the journey through BLOCK 10 in 12 weeks. Therefore, this course includes an intensive coursework load. Class attendance and participation are extremely important to your learning and are considered in the evaluation of your course grade. If there is anything that the module team can do to assist you during the course, please feel free to contact them. Attendance will be monitored during the different teaching activities. If your attendance is less

than 75%, you will not be allowed to sit for both block and annual examination.



All examinations must be taken on the date scheduled. No student will be allowed to enter the examination area after the examination starts. There will be a block exam at the end of each block and each block will cover two modules. There will be a total of 3 block examination and the 30% weightage of these block exam will be added to the 70 % of the annual professional exam as an internal assessment.

MODULE - 19

FOUNDATION



OUTCOME

GENERAL OUTCOME

By end of this module the students of final year BDS will be able to

- Define Aseptic techniques & universal precautions
- Enlist Techniques of instrument sterilization & disinfection
- Enlist instruments used in different surgical procedure
- Classify local anesthesia
- Describe different type of Anesthetic solution used in dentistry
- Discuss indication & contraindication of Local Anesthesia
- Enlist Ingredients of local anesthesia
- Explain complications of Local Anesthesia
- Enumerate the signs and symptoms of systemic complications
- Devise the management of systemic complications of local anesthesia
- Discuss pain & anxiety control
- Outline steps of Pre-surgical Medical Assessment
- Describe patient & surgeons' preparation
- Enlist the Indications & contraindications for the removal of teeth
- Demonstrate Chair position for Forceps extraction
- Explain mechanical principles involved in tooth extractions & principles of forceps use & mechanical principles of elevator use
- Define Prosthodontics
- Define Crown and Fixed Partial Dentures
- Classify different types of crown and Fixed partial denture
- Enlist the Indications and Contraindications of Crown and FPD.
- Enumerate various supporting and limiting structures of maxilla & mandible
- Define retention, stability and support
- Enlist and elaborate factors affecting denture retention.
- Define impression.
- Enlist types of trays.
- Enlist ideal qualities of trays.
- Differentiate between primary and final impression
- Enlist objectives of impressions
- Classify impression techniques
- Enlist primary impression materials
- Enlist prerequisites for primary impressions
- Elaborate on Impression taking technique
- Prescribe disinfection of impression.
- Describe various steps in history taking.
- Discuss the methods and tests available for diagnosing a tooth.
- Correlate the findings of various diagnostic tests and investigations.
- Explain the importance of interpretation of a radiograph.
- Define dental caries.
- Explain the etiology of dental caries.
- Draw the Modified Keyes-Jordan diagram.
- Discuss the demineralization-remineralization balance.
- Discuss the remineralization mechanism of a white spot lesion.
- Classify dental caries.
- Compare the clinical characteristics of normal and altered enamel.
- Analyze the clinical and radiographic characteristics of dental caries.



Explain the dentinal reaction to caries.
Illustrate caries risk assessment factors.
Compare the surgical and medical models of caries management.
Discuss the strategies for caries prevention and management.
Design a treatment plan
Classify hand instruments.
Review the uses of cutting hand instruments.
Review the hand instruments techniques.
Review the common design characteristics of rotary cutting instruments.
Discuss the recommendations for effective and efficient cutting.
Discuss the hazards associated with cutting instruments
Explain minimally invasive dentistry and why to prefer it over extensive tooth preparation.
Define orthodontics and discuss orthodontic history
Define the key concepts and terminology used in orthodontics
Define bone remodeling, drift and displacement,
Differentiate between growth site and growth center
Discuss neural crest cells and pharyngeal arches
Describe endochondral/ intramembranous bone growth
Discuss pre-natal & post-natal growth of cranial base, maxilla and mandible
Discuss growth spurts and growth mechanisms
Identify genetic & epigenetic factors affecting growth and development
Explain theories of growth & development
Discuss different types of growth rotations
Understand growth of the soft tissues of the face
Explain clinical implications of growth in orthodontics
Discuss the normal features of primary dentition.
Describe different stages of normal dental developmental
Discuss mixed dentition problems and their management
Define primate spaces, leeway spaces and incisor liability, early and late mesial shift of molars
Identify dimensional changes in the dental arches
Recognize various stages of dental age

ATTITUDE:

By the end of the block the students will be able to



- Follow the basic ward protocols
- Participate in class and practical work efficiently
- Maintain discipline of the college.
- Follow the norms of the college properly.
- Communicate effectively in a team with colleagues and teachers.
- Demonstrate professionalism and ethical values in dealing with patients, cadavers, colleagues, and teachers.
- Communicate effectively in a team with colleagues and teachers.
- Demonstrate the ability to reflect on the performance.

ORAL AND MAXILLOFACIAL SURGERY

S.NO	TOPICS	LEARNING OBJECTIVE
1.	Introduction to OMFS	Introduction in the depth, width, domain and scope of the OMFS Discuss the ground rules for the academic year
2.	History & Diagnosis	Explain detailed history taking, Practice step by step extra oral & intraoral examination to reach a diagnosis. Order relevant investigations including radiographs.
3.	Treatment Planning	Devise a management plan.
4.	Sterilization types and techniques	Discuss Aseptic techniques & universal precautions Enlist techniques of instrument sterilization & disinfection Explain Maintenance of sterility Describe Operating disinfection Elaborate Surgical staff Preparation Define post surgical Asepsis
5.	Armamentarium	Identify instruments used for making incision,for elevating mucoperiosteum, retraction of soft tissues,materials for hemorrhage control, means to transfer sterile Discuss instruments for grasping tissue, bone cutting & removal removing soft tissue from bony defects used for suturing of oral mucosa ,to maintain mouth opening Explain different types of suctions to remove excess secretions from oral cavity
6.	Introduction to Local Anesthesia	Classify Anesthesia Describe different type of Anesthetic solution used indentistry Discuss indication & contraindication of Local Anesthesia
7.	Ingredients of Local Anesthesia (Cartridge & Systemic complications of L.A)	Enlist Ingredients of local anesthesia Discuss Complications of Local Anesthesia Enumerate the signs and symptoms of systemic complications Devise the management of systemic complications of local anesthesia
8.	Local Complications of L.A	Explain local and general complications related to local anesthesia

9.	Administration & techniques	Explain techniques of infiltration and block in maxilla & techniques of infiltration and block in mandible
10	Simple Exodontia Indications and Contra indications	Discuss pain & anxiety control Outline steps of Pre-surgical Medical Assessment Perform clinical examination of teeth for removal Interpret radiographs of teeth under consideration for extraction. Describe patient & surgeons' preparation Enlist the Indications & contraindications for the removal of teeth Demonstrate Chair position for Forceps extraction Explain mechanical principles involved in tooth extractions & principles of forceps use Describe procedure for closed extraction Select specific techniques for removal of each tooth Discuss post extraction care of tooth socket
11	Movements of extractions sequences of extraction and full mouth clearance	Discuss specific techniques for removal of each tooth and movements Explain the sequence of extraction
12	Complications of extractions, principles of elevator uses and complications related to elevator use	Enumerate Dental elevators Discuss mechanical principles involved in tooth extractions Explain principles of elevator use
13	Atraumatic extractions and socket preservation	Describe Atraumatic extractions Discuss methods of socket preservation for implant placement and prosthetic restorations

PROSTHODONTICS

S.NO	TOPICS	LEARNING OBJECTIVE
1.	Introduction to Prosthodontics	Define Prosthodontics Know different domains of the Prosthodontics specialty Classify different types of prosthesis
2.	Introduction to Removable Partial Denture	Define Removable Partial Denture Enlist the indications and contraindications of Removable Partial denture
3.	Introduction to Prosthodontics	Define Prosthodontics Distinguish different domains of the Prosthodontics specialty Classify different types of prosthesis Understand commonly used terms in prosthodontics
4.	Introduction to Fixed Prosthodontics	Define Crown and Fixed Partial Dentures Classify different types of crown and Fixed partial denture Enlist the Indications and Contraindications of Crown and FPD.
5.	Patient history recording Extra & Intra oral examination	Know the method of recording History and examination of patients needing removable partial denture
6.	Maxillary denture supporting & limiting structures	Enlist various supporting and limiting structures. Understand significance of supporting and limiting structures for denture functioning. Understand significance of each denture limiting and supporting structure.
7.	Mandibular denture supporting & limiting structures	Enlist various supporting and limiting structures. Understand significance of each denture limiting and supporting structure.
8.	Treatment planning for crown and fixed partial dentures	Know the available materials and Techniques for Crown and Fixed partial dentures Enlist the advantages and disadvantages for the replacement of missing tooth/ teeth Know different options for the Replacement of missing tooth

		Know the Designing of Crown and Fixed partial dentures
9.	Impression materials theories & techniques	Know the available materials and techniques for patients needing removable partial dentures
10.	Basic concepts	Define retention. Enlist and elaborate factors affecting denture retention. Define stability. Enlist and elaborate factors affecting denture stability. Define support. Enlist and elaborate factors affecting denture support.
11.	Primary Impression	Define impression. Enlist types of trays. Enlist ideal qualities of trays. Differentiate between primary and final impression Enlist objectives of impressions Understand concept of ideal impression making. Classify impression techniques Enlist primary impression materials Enlist prerequisites for primary impressions Elaborate on Impression taking technique Prescribe disinfection of impression.
12.	Patient management for record technique	Explain different methods to record impression

OPERATIVE DENTISTRY

S.NO	TOPICS	LEARNING OBJECTIVE
1.	Preliminary considerations for operative dentistry	<p>Discuss the modes of cross infection.</p> <p>Identify direct and indirect contamination of instruments.</p> <p>Describe the sterilization monitoring methods.</p> <p>Enlist the various methods of isolation of the operating field.</p> <p>Review the goals of operating field isolation.</p> <p>Explain different techniques of LA in endodontic/operative procedures.</p>
2.	Diagnosis & treatment planning in operative dentistry	<p>Describe various steps in history taking.</p> <p>Discuss the methods and tests available for diagnosing a tooth.</p> <p>Correlate the findings of various diagnostic tests and investigations.</p> <p>Explain the importance of interpretation of a radiograph.</p> <p>Describe various treatment phases.</p>
3.	Dental Caries	<p>Define dental caries.</p> <p>Explain the etiology of dental caries.</p> <p>Draw the Modified Keyes-Jordan diagram.</p> <p>Discuss the demineralization-remineralization balance.</p> <p>Discuss the remineralization mechanism of a white spot lesion.</p> <p>Interpret Stephan's curve.</p> <p>Classify dental caries.</p> <p>Compare the clinical characteristics of normal and altered enamel.</p> <p>Analyze the clinical and radiographic characteristics of dental caries.</p> <p>Explain the dentinal reaction to caries.</p> <p>Illustrate caries risk assessment factors.</p> <p>Compare the surgical and medical models of caries management.</p> <p>Discuss the strategies for caries prevention and management.</p> <p>Design a treatment plan</p>
4.	Instruments and equipment for tooth preparation	<p>Classify hand instruments.</p> <p>Review the uses of cutting hand instruments.</p> <p>Review the hand instruments techniques.</p> <p>Review the common design characteristics of rotary cutting instruments.</p> <p>Discuss the recommendations for effective and efficient cutting.</p> <p>Discuss the hazards associated with cutting instruments</p>
5.	Fundamentals of tooth preparation	<p>Recall the fundamental concepts related to tooth preparation.</p> <p>Enlist the objectives of tooth preparation.</p> <p>Discuss the factors affecting tooth preparation.</p>

		<p>Recall the classification of tooth preparation.</p> <p>Discuss the rule for cusp capping.</p> <p>Differentiate the tooth preparation for amalgam and composite restorations.</p> <p>Enumerate the terminology related to tooth preparation.</p> <p>Describe the stages/steps of tooth preparation.</p> <p>Explain minimally invasive dentistry and why to prefer it over extensive tooth preparation.</p>
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PEADODONTICS

<u>S.NO</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
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1.	Introduction to pediatric dentistry	<p>Explain the aims of pediatric dentistry</p> <p>Discuss the outline of treatment planning</p>
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ORTHODONTICS

<u>S.NO</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
1.	Introduction to Orthodontics	Define orthodontics and discuss orthodontic history Define the key concepts and terminology used in orthodontics Know different branches of orthodontics Describe the rationale/need of orthodontic treatment Recognize various types of malocclusions
2.	Growth & Development	Demonstrate the basic knowledge of craniofacial embryology Define bone remodeling, drift and displacement, Differentiate between growth site and growth center Discuss neural crest cells and pharyngeal arches Describe endochondral/ intramembranous bone growth Discuss pre-natal & post-natal growth of cranial base, maxilla and mandible Discuss growth spurts and growth mechanisms Identify genetic & epigenetic factors affecting growth and development Explain theories of growth & development Discuss different types of growth rotations Understand growth of the soft tissues of the face Explain clinical implications of growth in orthodontics
3.	Development of Dentition & Occlusion	Discuss the normal features of primary dentition. Describe different stages of normal dental developmental Understand abnormalities of eruption and exfoliation Discuss mixed dentition problems and their management Define primate spaces, leeway spaces and incisor liability Discuss early and late mesial shift of molars Identify dimensional changes in the dental arches Recognize various stages of dental age

ANATOMY

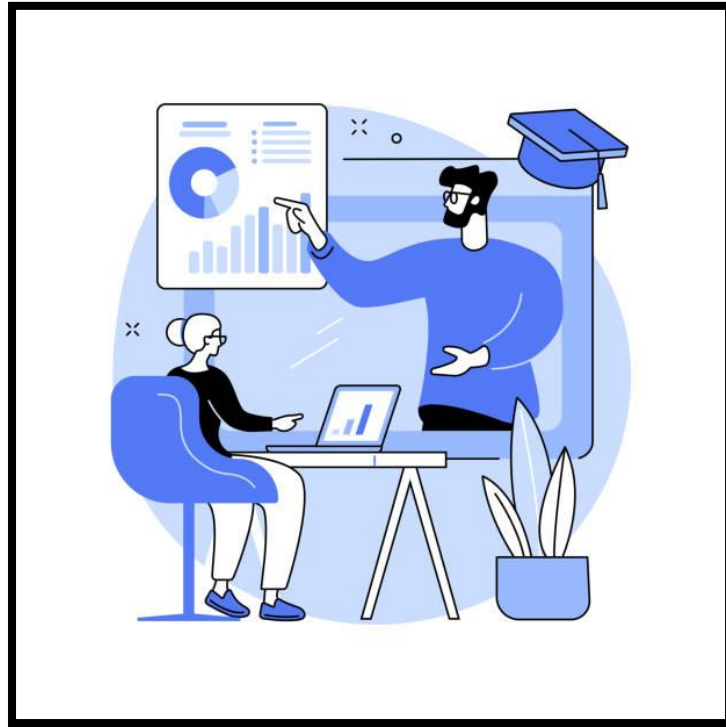
<u>S.NO</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
1.	Anatomy of Trigeminal and facial nerve	Course and pathway of facial and trigeminal nerve

ORAL BIOLOGY

<u>S.NO</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
1.	Embryology of Head, Face & Oral cavity	Discuss the embryology of head face & oral cavity
2.	Development of bone & its supporting tissues	Definition of bone Explain composition of bone and histology of bone Explain types origin structure formation functions and mechanism of action of bone cells Explain intramembranous endochondral and sutural bone formation Explain bone resorption Define bone remodelling

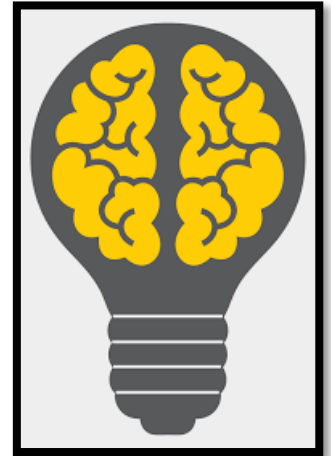
MODULE 20

BASIC PRINCIPLES OF CLINICAL DENTISTRY



OUTCOME

GENERAL OUTCOME



- Define basic principles of surgery
- Describe Incision and flap design, tissue handling and hemostasis, Decontamination & debridement, edema control
- Explain prevention of flap necrosis, flap dehiscence, flap tearing and tissue handling,
- Explain means of promoting wound hemostasis and dead space management
- Enumerate principles of suturing and different suture materials
- Discuss medical history in detail
- Devise management of medical emergencies and surgical management of patient with systemic disorders
- Classify flaps
- Explain Principles and techniques for surgical extraction
- Enlist indications of surgical extractions
- Describe technique for open extraction of single rooted and multi rooted teeth
- Demonstrate technique for removal of small root fragments and root tips & discuss policy for leaving root fragments and root tips
- Discuss multiple extractions and sequence
- Categorize the Principles of Tooth Preparation
- Enlist the Biological, mechanical and esthetic considerations for Tooth Preparation of Crown or Fixed Partial Denture
- Understand beading and boxing of impression
- Define custom tray & enlist steps of fabrication of custom trays
- Enlist border molding materials and its ideal properties
- Elaborate steps and techniques of border molding materials
- Discuss step of final/wash impression
- Define record base
- Enlist functions ,types, requirements & materials of record base
- Differentiate between temporary and permanent record bases
- Define occlusal rims
- Enlist uses of occlusal rims
- Enlist and explain fabrication of occlusal rims
- Define neutral zone
- Understand significance of neutral zone
- Identify issues with inaccurate occlusal vertical dimension
- Define maxillo mandibular relation,vertical relation, resting vertical dimension, occlusal vertical dimension, freeway space
- Classify maxilla mandibular relation
- Enlist types of vertical dimension
- Define horizontal relations
- Classify horizontal relations
- Define Centric relation & eccentric relation
- Enlist Advantages/ Disadvantages of different types of Removable partial denture
- Enlist Indications/ Contraindications of different types of Removable partial denture
- Classify types of Metal crowns based on material

Enlist Advantages/ Disadvantages of cast metal crown
 Enlist Indications/ Contraindications of Cast Metal Crown
 Classify partially dentate arches
 Define orientation relation, plane of orientation
 Define facebow
 Enlist indications & components of using a facebow
 Classify facebows
 Classify amalgam.
 Review the setting reaction of amalgam.
 Enlist the phases & sources of amalgam.
 Describe the clinical steps for class I & class II amalgam restoration.
 Classify dental composites
 Describe the mechanism of dental adhesion.
 List the key steps for the development of good adhesion.
 Cite examples of adhesive restorative technique
 Explain the mechanism of enamel adhesion & dentin adhesion.
 Explain the clinical technique for class I,II, III & class IV direct composite restorations
 Classify matrices.
 Enlist the qualities of good matrix.
 Enumerate different wedging techniques.
 Discuss the common errors in wedge placement.
 Describe the steps of matrix application for class III and IV restorations.
 Enlist various pharmacological and non-pharmacological methods of pain and anxiety control in pediatric patients.
 Discuss different non pharmacological behavioral management techniques for pediatric patients.
 Describe different sedation techniques for pediatric patients.
 Discuss the dental management of children with special needs (Handicapped Children).
 Describe features of normal occlusion
 Enlist Andrew six keys to normal occlusion
 Classify malocclusion
 Describe angles classification of malocclusion
 Classify etiological factors of malocclusion
 Enlist various teratogen affecting dentofacial development
 Discuss local & general etiological factor of malocclusion
 Enlist various developmental anomalies
 Enlist various diagnostic tools in orthodontics
 Discuss the importance of history, clinical examination & other diagnostic records in diagnosis.
 Learn various components of clinical examination and its importance for treatment planning
 Distinguish between macro, micro and mini aesthetics in clinical evaluation of face and teeth.
 Enlist different radiographs required for orthodontics diagnosis and treatment planning.
 Enlist the principles, indications, advantages and disadvantages of cephalometric radiographs.
 Discuss the use of CBCT in orthodontic diagnosis and treatment planning.
 Describe the principles, indications, advantages and disadvantages of orthopantomogram (OPG)
 Enlist different methods of growth assessment in orthodontics
 Discuss the basic principles, advantages and disadvantages of Cervical Vertebral Maturation (CVM) method.
 Identify skeletal age by using CVM method
 Explain clinical applications of CVM staging.

ATTITUDE:

By the end of the block the students will be able to



- Follow the basic ward protocols
- Participate in class and practical work efficiently
- Maintain discipline of the college.
- Follow the norms of the college properly.
- Communicate effectively in a team with colleagues and teachers.
- Demonstrate professionalism and ethical values in dealing with patients, cadavers, colleagues, and teachers.
- Communicate effectively in a team with colleagues and teachers.
- Demonstrate the ability to reflect on the performance.

ORAL AND MAXILLOFACIAL SURGERY

<u>S.N</u> <u>O</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
1.	Principles: Incision, flap design & tissue handling	Define basic principles of surgery and their implementation in minor and major surgical procedures Describe Incisions Describe Flap design Prevention of flap necrosis Prevention of flap dehiscence Prevention of flap tearing Discuss tissue handling
2.	Principles: Hemostasis management & edema control	Describe Tissue handling Describe Hemostasis Means of promoting wound hemostasis Dead space management
3.	Principles: Suturing, types techniques & indication	Principles of suturing Different types of suturing materials Indications of suturing
4.	Principles: Post operative care, nutrition & prevention of infection	Describe Decontamination & debridement Describe Edema control Discuss Patient general health & nutrition
5.	Prevention & management of medical emergencies	Discuss Medical History. Explain Physical Examination. Identify situation which can exaggerate the pre existing Medical condition Take appropriate preventive measure before treatment Diagnose and manage patients presenting with different medical conditions and Manage per-operative medical emergencies, if occur any
6.	Emergency medicine	Describe the management of medical emergencies in OMFS patients
7.	Management of patient with ischemic heart diseases	Diagnose and manage patients presenting with Ischemic Heart diseases Discuss different issues which can be raised during treatment regarding particular medical conditions
8.	Management of diabetic patients	Diagnose and manage patients presenting with Diabetes Discuss different issues which can be raised during treatment regarding particular medical conditions
9.	Management of patient with bleeding disorders & patients on anticoagulant	Diagnose and manage patients presenting with bleeding disorders and patient using anticoagulants Discuss different issues which can be raised during treatment regarding particular medical conditions
10.	Management of patient with renal failure & patient with dialysis	Diagnose and manage patients presenting with renal failure & patient with dialysis Discuss different issues which can be raised during treatment regarding particular medical conditions
11.	Management of pregnant & lactating patients ,infective endocarditis & patient on steroid therapy	Diagnose and manage patients presenting with pregnant & lactating patients ,infective endocarditis & patient on steroid therapy Discuss different issues which can be raised during treatment regarding particular medical conditions

12.	<p>Complicated Exodontia Surgical flaps & techniques Splitting techniques and sequencing</p>	<p>Discuss principles of flap design, development and management Design parameters for soft tissue flaps Types of mucoperiosteal flaps Principles of suturing Explain Principles and techniques for surgical extraction Indications for surgical extraction Technique for open extraction of single- rooted tooth Technique for surgical removal of multirooted teeth Removal of small root fragments and root tips Policy for leaving root fragments. Discuss Multiple extractions Treatment planning Extraction sequencing Technique for multiple extractions</p>
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PROSTHODONTICS

S.NO	TOPICS	LEARNING OBJECTIVE
1.	Principles of tooth preparation	Categorize the Principles of Tooth Preparation Enlist the Biological Considerations for Tooth Preparation of Crown or Fixed Partial Denture Enlist the Mechanical Considerations for Tooth Preparation of Crown or Fixed Partial Denture Enlist the Esthetic Considerations for Tooth Preparation of Crown or Fixed Partial Denture
2.	Study Casts	Know the method of fabrication of cast and its purposes Identify the faults in casts Know different types of casts
3.	Final impression	Enlist steps of fabrication of custom trays Understand significance of border molding Enlist ideal properties of border molding materials Classify border molding materials Elaborate of steps and techniques of border molding procedure Elaborate steps of final/wash impression procedure Understand beading and boxing of impression
4.	Record Base	Define record base Enlist functions of record base Enlist types of record base Enlist requirements of record base Enlist materials of record bases Differentiate between temporary and permanent record bases Explain steps of fabrication of trial denture base
5.	Occlusal rims	Define occlusal rims Enlist uses of occlusal rims Enlist and explain fabrication of occlusal rims Understand sequence of use of occlusal rims Define neutral zone Understand significance of neutral zone Determine neutral zone Determine level of occlusal plane
6.	Maxillomandibular relations Vertical	Define maxillo mandibular relation Classify maxilla mandibular relation Define vertical relation

	relations	<ul style="list-style-type: none"> Enlist types of vertical dimensions Define resting vertical dimension Enlist factors affecting rest position Establish resting vertical dimension Define occlusal vertical dimension Define freeway space Enlist and elaborate methods of determining vertical relation Identify issues with inaccurate occlusal vertical dimension
7.	<ul style="list-style-type: none"> Maxillomandibular relations Horizontal relations 	<ul style="list-style-type: none"> Define horizontal relations Classify horizontal relations Define Centric relation Comprehend significance of centric relation Enlist difficulties in obtaining centric relation Guide patient to centric relation Understand methods of recording centric relation Define eccentric relation Know method of recording eccentric relation Understand graphic recording of centric and eccentric relation
8.	Types of Partial Denture	<ul style="list-style-type: none"> Enlist Advantages/ Disadvantages of different types of Removable partial denture Enlist Indications/ Contraindications of different types of Removable partial denture
9.	Cast Metal Crowns	<ul style="list-style-type: none"> Classify types of Metal crowns based on material Enlist Advantages/ Disadvantages of cast metal crown Enlist Indications/ Contraindications of Cast Metal Crown Know recommended dimensions, Preparation features and steps of cast metal crown Know the Laboratory steps for fabricating Cast Metal Crown
10.	Kennedy classification of partially dentate arches	Classify partially dentate arches
11.	Maxillomandibular orientation relations	<ul style="list-style-type: none"> Define orientation relation Define plane of orientation Identify reference points Identify different planes of orientation Define facebow Enlist indications of using a facebow Enlist components of a facebow Classify facebows Depict facebow transfer procedure Enlist advantages of using facebow

OPERATIVE DENTISTRY

S.NO	TOPICS	LEARNING OBJECTIVE
1.	Dental Amalgam	<p>Classify amalgam.</p> <p>Review the setting reaction of amalgam.</p> <p>Name the phases of amalgam.</p> <p>Recognize the sources of mercury hazards in the dental operatory.</p> <p>Illustrate the dental mercury hygiene recommendations</p> <p>Discuss the general considerations for amalgam restorations.</p> <p>Illustrate the examples of complex amalgam restorations.</p> <p>Describe the clinical steps for class I & class II amalgam restoration.</p>
2.	Introduction to dental composite	<p>Classify Dental Composites.</p> <p>Review the general considerations for composite restorations.</p>
3.	Fundamentals concepts of enamel and dentin adhesion	<p>Describe the mechanism of dental adhesion.</p> <p>List the key steps for the development of good adhesion.</p> <p>Cite examples of adhesive restorative technique</p> <p>Explain the mechanism of enamel adhesion</p> <p>Explain the mechanism of dentin adhesion.</p> <p>Discuss the clinical challenges of dentinal adhesion.</p> <p>Classify dentinal adhesives.</p> <p>Explain the current strategies for resin-dentin bonding.</p> <p>Discuss the moist bonding technique.</p> <p>Discuss the clinical factors that may influence the success of adhesive restoration.</p> <p>Discuss microleakage and nano leakage.</p>
4.	Clinical technique for direct composite restoration	<p>Describe the clinical technique for class I & II direct composite restorations.</p> <p>Enlist the factors important in preparing a class I & II restorations.</p> <p>Explain the clinical technique for class III & class IV direct composite restorations.</p>
5.	Restoring contacts and contours	<p>Review the anatomy of proximal contact and contour.</p> <p>List the benefits of an ideal contact and contour.</p> <p>Classify matrices.</p> <p>Enlist the qualities of good matrix.</p> <p>Enumerate different wedging techniques.</p> <p>Discuss the common errors in wedge placement.</p> <p>Describe the steps of matrix application for class III and IV restorations.</p>

PEADODONTICS

<u>S.NO</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
1.	Child Management/Behavior management in dental practice	<p>Enlist various pharmacological and non-pharmacological methods of pain and anxiety control in pediatric patients.</p> <p>Discuss different non pharmacological behavioral management techniques for pediatric patients.</p> <p>Describe different sedation techniques for pediatric patients.</p> <p>Discuss the dental management of children with special needs (Handicapped Children).</p>

ORTHODONTICS

<u>S.NO</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
1.	Normal occlusion and malocclusions classification	<p>Describe features of normal occlusion.</p> <p>Enlist Andrew's six keys to normal occlusion.</p> <p>Understand different classifications of malocclusions.</p> <p>Describe Angle's classification of malocclusion</p> <p>Discuss British Standards Institute Classification of incisors</p> <p>Discuss drawbacks of Angle's classification.</p> <p>Understand individual teeth malpositions.</p> <p>Gain an understanding of different types of dental, skeletal and functional malocclusions</p>
2.	Etiology of malocclusion	<p>Understand the classification of etiological factors of malocclusions.</p> <p>Enlist various teratogens affecting dentofacial development.</p> <p>Understand local and general etiological factors of malocclusions.</p> <p>Discuss the role of harmful oral habits in malocclusion.</p> <p>Explain role of genetic factors in malocclusions</p> <p>Explain environmental factors leading to malocclusions</p> <p style="padding-left: 40px;">Enlist various developmental anomalies & syndrome causing malocclusions</p>
3.	Orthodontic Diagnosis	<p>Enlist various diagnostic tools in orthodontics</p> <p>Discuss the importance of history, clinical examination & other diagnostic records in diagnosis.</p> <p>Describe the information that needs to be gathered when taking a history from an orthodontic patient</p> <p>Learn various components of clinical examination and its importance for treatment planning</p> <p>Distinguish between macro, micro and mini aesthetics in clinical evaluation of face and teeth.</p> <p>Familiar with the basic TMJ examination</p> <p>Understand the importance of study models, photographs, and radiographs in orthodontics diagnosis</p> <p>Understand how to form a logical problem list</p> <p>Establish the diagnosis of malocclusions on the basis of history, clinical examination and records.</p>
4.	Orthodontic Cephalometry/Radiology	<p>Enlist different radiographs required for orthodontics diagnosis and treatment planning.</p> <p>Know the principles, indications, advantages and disadvantages of cephalometric radiographs.</p> <p>Gain an understanding of cephalometric tracings and analyses and their limitations.</p> <p>Interpret the results of a cephalometric analyses.</p> <p>Describe the principles, indications, advantages and disadvantages of orthopantogram</p>

		(OPG). Discuss the use of CBCT in orthodontic diagnosis and treatment planning.
5.	Skeletal age assessment in orthodontics	Enlist different methods of growth assessment in orthodontics Discuss the basic principles, advantages and disadvantages of Cervical Vertebral Maturation (CVM) method. Identify skeletal age by using CVM method Explain clinical applications of CVM staging. Know about the age assessment method by hand / wrist radiograph.

DENTAL MATERIALS

<u>S.NO</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
1.	Review of Impression Materials	Define Impression Classify Impression materials Composition of impression materials
2.	Review of Dental Amalgam	Define Dental Amalgam Enlist classification Composition of Amalgam Explain setting reaction Explain manipulation Indications Contraindications
3.	Review of Composite	Define Composite Classification Composition Indications Contraindications

RIPPLE

<u>S.NO</u>	<u>TOPICS</u>	<u>LEARNING OBJECTIVE</u>
1.	Ethics in Dentistry	Define Ethics Describe principles of ethics Explain the ethical rules for dentist



ASSESSMENT METHODS FOR BLOCK EXAM:

Evaluation is a continuous process comprising of block examination and annual university examination. Students will be evaluated throughout the year. The internal assessment will contribute towards the final examination scores.

Multiple examination methods including MCQs, SAQs, OSPE and viva will be used. In line with PMC stipulation, the pass/fail marks for the test and examination will be 50%.

There will be a block exam at the end of each block.

Theory (knowledge):

MCQs (Multiple Choice Questions) and SAQs (Short Answer Questions) are used to assess the theory part for the block exam.

MCQ:

- A MCQ has a statement or clinical scenario followed by four options (likely answers).
- After reading the statement/scenario student select ONE, the most appropriate answer/response from the given list of options.
- Correct answer carries one mark, and incorrect 'zero mark'. There is NO negative marking.

SAQ:

SAQ are open ended questions that requires students to create an answer. They are commonly used in examinations to access the basic knowledge and understanding of a topic.

OSPE:

Objective Structured Practical Examination (See the proposed plan of OSPE)

It may comprise between 12- 25 stations.

The content may assess application of knowledge, or practical skills.

Student will complete task in define time at one given station.

All the students are assessed on the same content by the same examiner in the same allocated time.

A structured examination will have observed, unobserved, interactive and rest stations.

OBSERVED AND INTERACTIVE STATIONS:

They will be assessed by internal or external examiners through the task or viva.

UNOBSERVED STATION:

It will be static station in which students will have to answer the questions related to the given pictures, models or specimens on the provided response sheet.

REST STATION:

It is a station where no task is given, and during this time student can organize his/her thoughts.



ASSESSMENT GRID FOR BLOCK EXAM

Component from BLOCK EXAM= Theory and Practical: 140+140															
Component from Internal Assessment= Theory and Practical 60+60															
Theory=600															
Marks Practical=600															
Total Marks: 1200															
<u>MODULE/BLOCK</u>		BLOCK – X				BLOCK – XI				BLOCK – XII					
		<u>Module- 19</u>		<u>Module-20</u>		<u>Module-21</u>		<u>Module-22</u>		<u>Module-23</u>		<u>Module-24</u>			
Professional Examination		Theory Marks		100		100		100		100		100			
		Practical Marks (OSPE)		200		200		200		200		200			
		Internal Assessment-IA		Theory: 60		Practical:60		Theory: 60		Practical:		Theory: 60		Practical:60	
		Subject wise distribution		MCQ#	SAQs#	OSCE Stations	viva	M C Q#	SAQs #	OSPE Stations#	viva	MCQs #	SAQs #	OSPE Stations	viva
		OMFS		23	3	5	15	23	3	5	15	23	3	5	15
		OPERATIVE		23	3	5	15	23	3	5	15	23	3	5	15
		ORTHODONTICS		23	3	5	15	23	3	5	15	23	3	5	15
		PROSTHODONTICS		23	3	5	15	23	3	5	15	23	3	5	15
		TOTAL#		92 (1 mark each)	12 (4 marks each)	20(4 marks each)=80	60	92 (1 mark each)	12 (4 marks each)	20(4 marks each)=80	60	92 (1 mark each)	12 (4 marks each)	20 (4 marks each)=80	60
		Total		92	48	140		92	48	140		92	48	140	
Total(theory+practiac)		140		140		140		140		140		140			
Internal Assessment		60		60		60		60		60		60			
Total marks		200		200		200		200		200		200			
Total Marks		400				400				400					
Grand total		1200													

INTERNAL ASSESSMENT MARKS DISTRIBUTION

THEORY INTERNAL ASSESSMENT 15 MARKS			PRACTICAL INTERNAL ASSESSMENT 15 MARKS	
ATTENDANCE 5 MARKS	ASSIGNMENTS AND PRESENTATIONS 5 MARKS	BEHAVIOUR /DISCIPLINE 5 MARKS	ATTENDANCE 5 MARKS	LOGBOOK 10 MARKS
91 and above 5 marks B/W 86% to 90%= 4 marks B/W 81% to 85%= 3 marks 76% to 80%= 2 marks 75%= 1 mark	Grade A=5 marks Grade B= 3 marks Grade C= 1 mark No assignments or presentations =0 marks	No misbehave or warning in lectures = 5 marks Written warning given to student = 0 marks	Above 90%= 5 marks B/W 85% to 90%= 4 marks B/W 80% to 85%= 3 marks 75% to 80%= 2 marks Upto 75%= 1 mark Below 75 % = 0 marks	Complete and timely signed =10 marks Completed and late submission=5 marks Incomplete or no logbook =0 marks (additional criteria student will not be allowed to appear for the exam)

LEARNING RESOURCES

<u>SUBJECT</u>	<u>RESOURCES</u>
<u>Oral & Maxillofacial Surgery</u>	<p>Contemporary oral & maxillofacial surgery by James hupp, Edward Ellis and Myron Tucker</p> <p>Fractures of Facial Skeleton by Micheal Perry, Andrew Brown and Peter Bank</p> <p>Handbook of local anesthesia by Stanley Melamed</p> <p>Essentials of dental radiography and radiology by Eric Whaites and Nicholas drage</p>
<u>ORTHODONTICS</u>	<p><u>Recommended Textbooks:</u></p> <ul style="list-style-type: none"> · Contemporary Orthodontics. by William R Profit · An introduction to Orthodontics. by Laura Mitchells <p><u>Reference Books:</u></p> <ul style="list-style-type: none"> · Orthodontics: Current Principles and Techniques By Graber · Esthetics and biomechanics in orthodontics by Nanda · Textbook of orthodontics by Bishara · Orthodontic and orthopaedic treatment in the mixed dentition By McNamara

<p><u>OPERATIVE DENTISTRY & ENDODONTICS</u></p>	<p>Pathways of the Pulp Endodontics: Principles and Practice Sturdevants Art & Science of Operative Dentistry Fundamentals of Operative Dentistry: a contemporary approach Pickard's manual of Operative Dentistry</p>
<p><u>PROSTHODONTICS</u></p>	<p>Mc Cracken Removable Partial Prosthodontics 13th Ed Stewarts Clinical Removable Partial Prosthodontics 4th Ed Contemporary Fixed Prosthodontics 6th Ed Fundamentals of Fixed Prosthodontics 4th Ed Prosthodontics treatment of edentulous Patient 14th Ed Complete Denture Prosthodonticsby John Joy Manappilil 3rd Ed</p>
<p><u>PEDIATRIC DENTISTRY</u></p>	<p>Recommended text book A manual of Pediatric Dentistry Andlaw R.J & Roel W.P Reference Books Pediatric Dentistry (infancy through Adolescence)-Pinkham Pediatric Dentistry-Welbury Dentistry for Child & Adolescence- Mc.Donald</p>

OTHER LEARNING RESOURCES

Hands-on Activities/ Practical

Students will be involved in Practical sessions and hands-on activities that link with the foundation module to enhance the learning.

Labs

Utilize the lab to relate the knowledge to the specimens and models available.

<p style="text-align: center;"><u>Skill Labs</u></p>	<p>A skills lab provides the simulators to learn the basic skills and procedures. This helps build the confidence to approach the patients.</p>
<p style="text-align: center;"><u>Videos</u></p>	<p>Video familiarize the student with the procedures and protocols to assist patients.</p>
<p style="text-align: center;"><u>Computer Lab/CDs/DVDs /Internet Resources</u></p>	<p>To increase the knowledge students should utilize the available internet resources and CDs/DVDs. This will be an additional advantage to increase learning.</p>
	<p>SDL is scheduled to search for information to solve cases, read through different resources and discuss among the peers and with the faculty to clarify the concepts.</p>

