



FATIMA JINNAH DENTAL COLLEGE HOSPITAL

STUDY GUIDE

Final Prof BDS 2026

NAME: _____

BATCH: _____ **ROLL NO:** _____

INTRODUCTION

Study Guide: A guide book is created to facilitate learning, provide direction and point out required critical information to students to maximize the benefit each student can attain from the academic program.

This book will help you in providing:

1. Information on organization and management of the course.
2. A description of the course objectives which will you will be expected to achieve at the end of the course.
3. Information on learning methods that you will experience during the course.
4. Information on Assessment and examination policy, rules and regulations.

COURSES:

Several courses of different durations will be taught in the subjects offered in third year as per the PMC guidelines. The academic year, which includes teaching, assessments, Midterms and pre- Prof Examinations comprises of approximately 40-42 weeks.

The Examining subjects for third year by the University are:

1. Operative Dentistry
2. Prosthodontics
3. Oral And Maxillofacial Surgery
4. Orthodontics

Non Examinable subjects have weightage in the 4th Professional Year Exams. Course No: Each course has a title and a number.

Learning Methods:

- Lectures (LEC)
- Small group discussions (SGD)
- Bed side training (BSD)
- Chair side Training (CST)
- Learning with typodonts (TYP)
- Learning with Histological Slides (HS)
- Skills lab (SL)

ASSESSMENTS

- Exam will be held at the end of every clinical rotation.
- Four CATS (Continuous Assessment Test) for each subject throughout the year will be conducted for regular candidates and the candidates repeating the year.
- The annual examinations will be conducted by the University.
- Minimum passing marks in all the assessments are 50% of the total marks.

INTERNAL EVALUATIONS:

- The University requires internal evaluations which are based on the overall performance throughout the year in OSCE's, CAT's and Midterms.
- Total 20% weightage of OSCE and Theory will be sent to the University.

ELIGIBILITY FOR THE ANNUAL EXAMINATIONS:

- Minimum of 90% attendance is required as per the University policy and rules.
- Attendance in every clinical rotation assessment and CAT's, midterms and Pre- Professional exams is mandatory.
- If you miss an end of rotation assessment, you will not be allowed to attend the next posting.
- Clearance of all college dues is mandatory.

RULES FOR REPEATING THE YEAR:

- A student who fails to clear 100% subjects of the year after the Resit/ supply examinations of that year will be considered a Repeater.
- Student repeating will attend all classes of the subject(s) (theory / rotations) he/she was declared failed in. She/he will appear in all CAT's of the subject(s) in which he/ she were declared failed in.
- The repeater will pay the fees for the subject in which He/ She were declared fail, which will be not less than 25% of the total annual fee per subject to a maximum to 75% of the fee.
- If for any reason a student is unable to appear in the annual examination, he/ she can avail one chance for that academic year, i.e. to take the Resit/ supply examination. This will be counted as the second attempt.

ASSESSMENT ADMINISTRATION RULES AND REGULATION:

To ensure that the assessments are held according to the standard conditions and that no examinee receives unfair advantage in the assessment, students must adhere to / abide by the rules and regulations of the institution and the university.

The Following examples include misconduct but not necessarily limited to misconduct

1. Copying or attempting to copy answers from another student or allowing answers to be copied.
2. Making notes of any kind during the assessment.
3. Failure to follow the instructions of the staff present.
4. Acts of disruptive behavior such as raising one's voice, talking to others during the examination.
5. Possession of any unauthorized material such as any photographic equipment or communication device.
6. Memorizing and reproducing examination materials and any unauthorized reproduction by any means.

STUDENTS SHOULD REMEMBER:

1. Students should arrive in the lecture hall/ examination hall 10 minutes before the exam.
2. Students should wear college identification at all times.
3. Admit cards are mandatory to take the exam.



ORTHODONTICS STUDY GUIDE

COURSE NAME: INTRODUCTION TO ORTHODONTICS

Course code: FJO4- ORT- 1

Learning objectives:

- 1.1 Define orthodontics and introduction to orthodontics
- 1.2 Enumerate types of orthodontic treatment
 - a. Preventive treatment
 - b. Interceptive treatment
 - c. Corrective treatment
- 1.3 Discuss indication/ contraindication of orthodontic treatment
- 1.4 Discuss aims and need of orthodontic treatment

S. NO	TOPICS	MIT	HOURS	ASSESSMENT BCQ OSCE	
1.	Introduction to orthodontics	LEC	01	✓	
2.	Enumerate the aims/ need, indication/ contraindication for orthodontic treatment	LEC	01	✓	
	TOTAL		02 Hours		

COURSE NAME: GROWTH AND DEVELOPMENT

Course code: FJ04-ORT-02

Learning Objectives:

2.1 Define basic concepts of Growth and Development

2.2 Describe the variables affecting growth

2.3 Describe the methods of studying growth

2.4 Discuss various theories of growth

2.5 Discuss post natal craniofacial growth

2.6 Discuss application of growth in orthodontics

S.NO	TOPICS	MIT	HOURS	ASSESSMENT	
				BCQ	OSCE
1	Discuss growth concepts	LEC	01	✓	✓
2	Describe the variables affecting growth. Describe the methods of studying growth	LEC	01	✓	✓
3	Discuss various theories of growth	LEC	01	✓	
4	Discuss post natal craniofacial growth Discuss application of growth in orthodontics	LEC	02	✓	✓
	TOTAL		05 Hours		

COURSE NAME: OCCLUSION AND MALOCCLUSION

Course code: FJ04-ORT-03

Learning Objectives:

- 3.1 Define occlusion
- 3.2 Define terminologies of occlusion and malocclusion
- 3.3 Discuss Class I, II, and III malocclusion
- 3.4 Describe Andrews's six keys of occlusion
- 3.5 Describe Ackerman profit classification

S.NO :	TOPICS	MIT	HOURS	ASSESSMENT BCQ	OSCE
1.	Define occlusion Define terminologies of occlusion and malocclusion Discuss Class I, II, and III malocclusion	LEC	01	✓	✓
2	Describe Andrews's six keys of occlusion Describe Ackerman profit classification	LEC	01	✓	✓
	Total		02 hours		

COURSE NAME: DEVELOPMENT OF DENTITION AND OCCLUSION

Course code: FJ04-ORT-04

Learning Objectives:

- 4.1 Describe factors affecting development of occlusion.
- 4.2 Describe the features of primary, mixed and permanent dentition
- 4.3 Describe the dimensional changes in dental arch that occur in growing age.
- 4.4 Determine dental age based on tooth eruption.
- 4.5 Describe variations in development including size, form, number and position of teeth

S.NO	TOPICS	MIT	HOURS	ASSESSMENT BCQ	OSCE
1.	Describe in detail the development of dentition and occlusion Describe the features of primary, mixed and permanent dentition	LEC	01	✓	✓
2.	Describe the dimensional changes in dental arch that occur in growing age (leeway space, primate space, incisor liability) Determine dental age based on tooth eruption.	LEC	01	✓	✓
5.	Describe variations in development including size, form, number and position of teeth (dental anomalies)	LEC	01	✓	✓
	Total		03 hours		

COURSE NAME: ETIOLOGY OF MALOCCLUSION

Course code: FJO4- ORT- 05

Learning objectives:

5.1 Discuss etiology of malocclusion

- a. Local/ environmental factors
- b. Hereditary factors
- c. Habits (thumb sucking/ tongue thrusting)

5.2 Differentiate the role of malformation, disruption and deformation in craniofacial anomalies. (Syndromes)

S.No	TOPIC	MIT	HOURS	ASSESSMENT	
				BCQ	OSCE
1.	Etiology of Malocclusion • Skeletal factors • Soft tissue factors • Local /dental factors • Habits	LEC	02	✓	✓
2.	Craniofacial anomalies (syndromes)	LEC	01	✓	✓
	TOTAL		03 Hours		

COURSE NAME: BIOLOGY OF TOOTH MOVEMENT

Course code: FJ04- ORT- 06

Learning objectives:

- 6.1 Describe physiology and theories of tooth movement
- 6.2 Discuss effect of orthodontic forces
- 6.3 Discuss tooth movement and factors affecting it
- 6.4 Discuss anchorage and its types

S.No	TOPICS	MIT	HOURS	ASSESSMENT BCQ OSCE	
1.	Physiological tooth movement & theories of tooth movement	LEC	01	✓	
2.	Drugs effect on response to orthodontic force Deleterious effects of orthodontic tooth movement	LEC	01	✓	
3.	Describe factors affecting orthodontic movement	LEC	01	✓	✓
4.	Discuss anchorage and its types	LEC / SGD	04	✓	✓
	TOTAL		07 Hours		

COURSENAME: DIAGNOSTIC AIDS IN ORTHODONTICS

Course code: FJ04-ORT-07

Learning Objectives:

- 7.1 Discuss evaluation of diagnostic records
- 7.2 Perform the procedure for history taking
- 7.3 Perform analysis of dentition and occlusion
- 7.4 Perform the procedure of extra oral and intraoral examination
- 7.5 Perform orthodontic record taking

S.NO	TOPICS	MIT	HOURS	ASSESSMENT BCQS	OSCE
1.	7.1 Understanding of the evaluation of diagnostic records	LEC	1	✓	✓
2.	7.2 History taking	OPD	15		✓
3.	7.3 Cast analysis	SL	15		✓
4.	7.4 Methods of space analysis (permanent dentition analysis) (mixed dentition analysis)	SL	30		✓
5.	7.5 Analysing face profile (frontal and lateral view) Analysing macro, micro, mini aesthetics. Optimal smile and clinical implications	OPD	12	✓	✓
6.	7.6 Clinical photography	Workshop	02		✓
7.	7.7 Collection of patient information and diagnostic data and construct a problem list	SGD	10		✓
	Total		85 hours		

COURSE NAME: DENTAL RADIOLOGY

Course code: FJ04- ORT- 8

Learning Objectives:

- 8.1 Discuss the indications of radiographs for orthodontic purpose
- 8.2 Enumerate different radiographs; orthopantograph, lateral cephalometric, hand- wrist x-rays, CVM, MP3 method and periapical view with its clinical application.
- 8.3 Describe variation in normal limits and abnormalities.
- 8.4 Discuss proper patient positioning while taking the cephalometric radiographs
- 8.5 Discuss radiation hazards.
- 8.6 Discuss the advantages and indications of CBCT (cone-beam computed tomography) in relation to orthodontics
- 8.7 Determine dental age on the basis of tooth development (NOLLA's Stages)

S.No	Topic	MIT	Hours	ASSESSMENT BCQ	OSCE
1.	Indications of radiographs and discuss different types of radiographs	LEC	01	✓	
2.	Identification of cephalometric landmarks	LEC	01	✓	✓

	and Interpretation of cephalometric analysis				
3.	Identification of cephalometric landmarks and Interpretation of cephalometric analysis	SL	50	✓	✓
4.	Determine dental age on the basis of tooth development (NOLLA's Stages)	LEC/ SGD	02	✓	✓
	TOTAL		54 hours		

COURSE NAME: BIOMECHANICS AND MATERIALS

Course code: FJ04-ORT-09

Learning Objectives:

9.1 Discuss materials in orthodontics

9.2 Discuss basic mechanics and terminologies of biomechanics

9.4 Discuss determinate vs. indeterminate force system

S.NO	TOPICS	MIT	HOURS	ASSESSMENT BCQ	OSCE
1.	Materials and production of orthodontic force	LEC	02	✓	
2.	Discuss basic mechanics and terminologies of biomechanics	LEC	01	✓	✓
4.	Determinate & indeterminate force system	LEC	01	✓	✓
	TOTAL		04 Hours		

COURSE NAME: REMOVABLE APPLIANCES

Course code: FJ04-ORT-10

Learning Objectives:

10.1 Discuss the types and indications of removable appliances

10.2 Discuss its components, advantages and disadvantages.

10.3 Discuss its mode of action.

S.NO:	TOPICS	MIT	HOURS	ASSESSMENT BCQS	OSCE
1.	Types, components, advantages and disadvantages of removable appliances and mode of action of a removable appliance	LEC	01	✓	✓
2.	Components of Removable appliances	SL	23		✓
3.	Fitting and activation of a removable appliance	SGD	03		
	Total		27 hours		

COURSE NAME: FUNCTIONAL APPLIANCE

Course code: FJ04- ORT- 11

Learning Objectives

- 11.1 Define functional appliance
- 11.2 Classify functional appliance
- 11.3 Discuss indications of functional appliances
- 11.4 Discuss components of functional appliance
- 11.5 Discuss possible approaches for treatment of Class II and class III skeletal problems

S.NO	TOPICS	MIT	HOURS	ASSESSMENT BCQ OSCE	
1	Discuss functional appliances (types, indication, components)	LEC	01	✓	✓
2	Functional appliances for skeletal class II and III malocclusion	LEC	01	✓	✓
3	Functional appliance	SGD	03	✓	
	TOTAL		05 hours		

COURSE NAME: FIXED APPLIANCE

Course Code: FJ04-ORT-12

Learning Objectives:

12.1 Describe different types of fixed appliance system

12.2 Discuss indications and drawbacks of fixed appliance

12.3 Describe different components and accessories of fixed appliance

12.4 Define comprehensive orthodontics

12.5 Discuss different stages of comprehensive orthodontics

S.NO	TOPICS	MIT	HOURS	ASSESSMENT BCQ	OSCE
1	Difference between different fixed appliance system and discuss its indications and contraindications.	LEC	01	✓	✓
2	Components of fixed appliance system, Edgewise appliance(alignment and leveling , space closure , finishing in orthodontics)	LEC	01	✓	✓
3	Perform separator placement	SL	03		✓
4	Perform Banding	SL	03		✓
5	Perform Bonding	SL	03		✓
6	Perform wire insertion and o-ring placement	SL	03		✓
7	Perform power chain placement, co-ligation and single tie	SL	03		✓
	TOTAL		17 hours		

COURSENAME: ORTHOPEDIC APPLIANCES

Course code: FJ04- ORT- 13

Learning Objectives:

- 8.1 Define orthopedic appliance
- 8.2 List the indications for orthopedic appliance
- 8.3 Classify different types of orthopedic appliance
- 8.4 Discuss types of headgear
- 8.5 Discuss growth modification with headgear, facemask and chin cup.

S.No	Topic	MIT	Hours	ASSESSMENT BCQ OSCE	
1.	Define orthopedic appliances, discuss headgear and its type	LEC	1 hour	✓	✓
2.	Discuss facemask /reverse pull headgear and chin cup	LEC	1 hour	✓	✓
3.	Orthopedic appliances	SGD	2 hour		
	TOTAL		4 hours		

COURSE NAME: TREATMENT PLANNING

Course code: FJ04-ORT-14

Learning Objectives:

14.1 Discuss non-skeletal problems in sagittal, vertical and transverse plane of space.

14.2 Discuss skeletal problems in sagittal, vertical and transverse plane of space.

14.3 Discuss indications of extraction in orthodontics

14.4 Describe treatment planning concept and goals in primary, mixed and permanent dentition

S.NO:	TOPICS	MIT	HOURS	ASSESSMENT BCQS	OSCE
1.	14.1 Identify the dental or skeletal problem Discuss non-skeletal problems in sagittal, vertical and transverse plane of space. (cross bite, deep bite, open bite, excessive over jet, crowding, class II, III, canine impaction)	LEC	05	✓	✓
2.	14.2 Discuss skeletal problems in sagittal, vertical and transverse plane of space.	LEC	02		✓
3.	14.3 Address the need for extraction in orthodontics (extraction vs. non-extraction)	LEC	01	✓	
4.	14.4 Describe treatment planning concept and goals in primary, mixed and permanent dentition	SGD	12		
	Total		20 hours		

COURSE NAME: INTERCEPTIVE ORTHODONTICS

COURSE code: FJ04-ORT-15

Learning Objectives:

15.1 Define space maintainer and different appliances/armamentarium for space maintenance

15.2 Define space regaining

15.3 Define serial extraction and discuss protocol followed for serial extraction

S.NO:	TOPICS	MIT	HOURS	ASSESSMENT BCQS	OSCE
1.	Recognize and formulate the interceptive orthodontic treatment for the patient	LEC	02		✓
2.	Define space maintainer and different appliances, space regaining, serial extraction, balancing and compensation	SGD	03	✓	
	Total		05 hours		

COURSE NAME: CLEFT LIP AND PALATE

COURSE code: FJ04-ORT-16

Learning Objectives:

16.1 Determine aetiology and clinical features and of cleft lip and palate.

16.2 Discuss different classification of cleft lip and palate.

16.3 Discuss sequence and management of cleft.

S.NO:	TOPICS	MIT	HOURS	ASSESSMENT BCQS	OSCE
1.	Explain the aetiology, types and clinical presentation of patients with cleft lip and palate	LEC	01	✓	
2.	Role of orthodontist in the management of cleft lip and palate	LEC	01		✓
	Total		02 hours		

COURSE NAME: RETENTION AND RELAPSE

Course code: FJ04- ORT- 17

Learning objectives:

17.1 Define Retention and Relapse

17.2 Discuss concepts of retention

17.3 Discuss factors related to relapse

17.4 Discuss management of different types of malocclusion

17.5 Discuss special procedures to avoid relapse

17.6 Discuss different types of fixed and removable retention.

S.NO	TOPICS	MIT	HOURS	ASSESSMENT	
				BCQ	OSCE
1.	Describe the concept and management of retention, relapse, & stability and explain factors affecting it	LEC	01	✓	✓
2	Removable appliance as retainer	SL	01	✓	✓
	TOTAL		02 Hours		

COURSE NAME: SURGICAL ORTHODONTICS

Course code: FJ04-ORT-18

Learning Objectives:

18.1 Discuss the principle and types of orthognathic surgery

18.2 Enumerate indications and contraindications of orthognathic surgeries

18.3 Interpret Class II and Class III surgical treatment options

S.No	TOPICS	MIT	HOURS	ASSESSMENT	OSCE
				BCQ	
1.	Identify and discuss the patients undergoing orthognathic surgery and role of orthodontist in patients undergoing orthognathic surgery	LEC	01	✓	
	TOTAL		01 Hours		

COURSE NAME: ADJUNCTIVE ORTHODONTICS:

Course code: FJ04-ORT-19

Course objectives:

19.1 Define adjunctive orthodontics

19.2 Discuss anatomy of periodontal structures

19.3 Classify periodontal disease.

19.4 Discuss etiology and clinical features of periodontal disease

19.5 Interpret the role of orthodontist in management of periodontal disease and in facilitation of prosthetic treatment

S.NO	TOPICS	MIT	HOURS	ASSESSMENT BCQ	OSCE
1.	Ortho-perio-restorative interface	Lecture	01	✓	
	TOTAL		01 Hours		

STUDY GUIDE PROSTHODONTICS IN FINAL YEAR BDS PROGRAM

STUDENT DESCRIPTION AND RATIONALE:

The prosthodontics curriculum consists of two main components: Theoretical and Clinical parts. The theoretical part includes lectures that provide insight of prosthesis affecting oral and para-oral structures of hard and soft tissues. The clinical part includes fabrications of removable partial prosthesis and evaluation of students in workshops, to refine the students' clinical abilities.

LEARNING OUTCOMES:

By the end of this course, students should be able to:

1. Classify and identify the partial and complete edentulous state of the patient.
2. Plan an adequate prosthesis according to patient need and demands.
3. Explain the consequences of tooth loss and replacement of missing teeth.
4. Fabricate 3 removable partial dentures and 1 complete denture of either arch under supervision.
5. Tooth preparation on model to receive a PFM crown for Molar, Pre Molar and Central Incisor.
6. Wax-up of metal crown on prepared molar tooth.

COURSE NAME: INTRODUCTION TO PARTIAL DENTURES

COURSE CODE: FJ04-PD-1

COURSE OBJECTIVES:

- 1.1 Define prosthetic dentistry.
- 1.2 Enlist the divisions of prosthetic dentistry
- 1.3 Describe the benefits of an RPD
- 1.4 Discuss the tissue damages associated with RPDs
- 1.5 Explain the need and demand of removable partial denture treatment.
- 1.6 Describe the biomechanics and design solutions for a RPD

MODE OF INFORMATION TRANSFER (MIT)& ASSESSMENT

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Partially edentulous epidemiology, physiology & terminology. Classification of partially edentulous arches. Applied anatomy and physiology Oral manifestations of local and systemic disease	LEC	2	✓	✓
2	Principles of removable partial denture design	LEC	1	✓	✓
3	Biomechanics	LEC	2	✓	✓
		Total	5		

COURSE NAME: COMPONENTS

COURSE CODE: FJ04-PD-2

COURSE OBJECTIVES:

- 2.1 Identify the components of a removable partial denture
- 2.2 Explain the means of achieving direct and indirect retention
- 2.3 Explain the type of maxillary and mandibular connectors and their indications
- 2.4 Explain tooth preparation procedures for removable Prosthodontics

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Connectors (major and minor connectors)	LEC	3	✓	✓
2	Rests and Rest Seats	LEC	2	✓	✓
3	Direct retainers	LEC	2	✓	✓
4	Indirect retainers	LEC	1	✓	✓
5	Denture base considerations.	LEC	1		✓
		Total	9		

COURSE NAME: SURVEYING

COURSE CODE: FJ04-PD-3

COURSE OBJECTIVES:

- 3.1 Identify the parts of a dental surveyor
- 3.2 Explain the surveying process for a removable partial denture in detail

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Surveying	LEC	2	✓	✓
2	Surveying	DEMO	2		
			4		

COURSE NAME: IMPRESSION TECHNIQUES

COURSE CODE: FJ04-PD-4

COURSE OBJECTIVES:

- 4.1 Enlist common impression materials and their uses
- 4.2 Identify the different types of impression trays
- 4.3 Explain the impression procedure for an RPD in detail

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Impression techniques and modification	LEC	1	✓	✓
2	Impression techniques	WS	2		
		Total	3		

COURSE NAME: DESIGNING, FABRICATION AND DELIVERY

COURSE CODE: FJ04-PD-5

COURSE OBJECTIVES:

- 5.1 Preparation of abutment teeth to receive direct and indirect components of RPD
- 5.2 Describe the protocol and sequence of RPD framework try in
- 5.3 Enlist instructions which can be given to the patient at insertion
- 5.4 Describe the post insertion follow-up sequence

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Preparation of mouth for removable partial dentures Preparation of abutment teeth.	LEC	1	✓	✓
2	Trial of metal framework	LEC	1	-	✓
3	Occlusal relations for removable partial denture. (Maxillo- mandibular relations)	LEC	1	✓	✓
4	Insertion and post insertion instructions and recall.	LEC	1	✓	✓
	Preparation of mouth for removable partial dentures Preparation of abutment teeth.	CST	2		
	Trial of metal framework	CST	2		
	Occlusal relations for removable partial denture. (Maxillo- mandibular relations)	CST	2		

5	Insertion and post insertion instructions and recall.	CST	2		
		TOTAL	12		

COURSE NAME: TYPES OF REMOVABLE PARTIAL DENTURES

COURSE CODE: FJ04-PD-6

COURSE OBJECTIVES:

- 6.1 Identify the different types of RPD
- 6.2 Indications of different types of RPD
- 6.3 Advantages and disadvantages of different types of RPD

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Types of partial denture 1. Interim partial denture 2. Every denture 3. Spoon denture 4. Swing lock partial denture	LEC	1	✓	✓
		TOTAL	1		

COURSENAME:COMPLETE DENTURE; INTRODUCTION TO COMPLETE DENTURES

COURSE CODE: FJ04-CD-7

COURSE OBJECTIVES:

- 7.1 Learn the terminologies used in removable Complete Denture.
- 7.2 Enlist steps in the fabrication of complete dentures
- 7.3Describe the anatomical landmarks common to both maxillary and mandibular arches.
- 7.4Identify various anatomic landmarks located in maxilla and mandible

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Definitions(Glossary of Prosthodontic Terms) Applied anatomy and physiology of complete denture Peripheral tissue attachment of denture bearing area	LEC	1	✓	✓
2	Tongue Form Saliva	LEC	1	✓	✓
		Total	2		

COURSE NAME:ANATOMICAL LANDMARKS

COURSE CODE: FJ04-CD-8

COURSE OBJECTIVES:

8.1 Define the factors affecting complete denture retention

8.2 Identify the different peripheral tissue attachment that limit complete dentures

8.3 Identify the structures that support the maxillary and mandibular dentures

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Systemic disorders and applied pathology Muscle tone and muscle development Osmotic Balances Pascal's law and its corollaries, atmospheric pressure, intermolar attraction, interfacial surface tension Oral lesions with skin manifestations Psychiatric evaluation of patients	LEC	2	✓	✓
2	Oral conditions of Denture Bearing Area Ridge form and ridge relations Oral mucosa: Resistant and Non resistant Alveolar bone resorption Face Forms	LEC	1	✓	✓
3	Fundamentals of denture retention and contributing	LEC	1	✓	✓
4	Mouth preparation including preprosthetic surgery	LEC	1	✓	✓
	Total		5		

COURSE NAME: IMPRESSION, THEORIES AND TECHNIQUES

COURSE CODE: FJ04-CD-9

COURSE OBJECTIVES:

9.1 Enlist common impression materials and their uses

9.2 Identify the different types of impression trays

9.3 Explain the impression procedures and techniques for complete dentures in detail

9.4 Explain the different techniques required to achieve success in complete
Dentures

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Objectives of impression Theories and techniques Impression technique: minimum pressure, definite pressure, selective pressure	LEC	2	✓	✓

	impression Impression techniques: primary, wash and secondary impression, impression trays, impression materials				
2	Stability	LEC	1	✓	✓
3	Impression technique: minimum pressure, definite pressure, selective pressure impression	WS	2		
4	Impression techniques: selection of impression trays, mixing of impression materials, primary, wash and secondary impression,	DEMO	2		
5	Impression techniques: selection of impression trays, mixing of impression materials, primary, wash and secondary impression	CST	2		
	Total		9		

COURSE NAME: ARTICULATION, ARTICULATORS AND FACEBOW

COURSE CODE: FJ04-CD-10

STUDENT OBJECTIVES:

- 10.1 Define articulators
- 10.2. Discuss in detail various types of articulators
- 10.3 Differentiate between the different types of articulators
- 10.4 Describe Face bow, its types and uses
- 10.5 Discuss the transfer of facebow record to an articulator

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Articulators	LEC	1	✓	✓
2	Theories of Articulation Occlusion	LEC	1	✓	✓
3	Facebow	LEC	1	✓	✓
4	Articulators	WS	2	✓	✓
5	Facebow	WS	2	✓	✓
	Total		7		

COURSE NAME: MAXILLO MANDIBULAR RELATIONS

COURSE CODE: FJ04-CD-11

COURSE OBJECTIVES:

- 11.1 Define maxilla mandibular relations
- 11.2 Discuss mandibular movements in frontal, sagittal and horizontal plane
- 11.3 List basic mandibular positions
- 11.4 Define resting vertical and occlusal dimensions

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Maxillomandibular relations.	LEC	2	✓	✓
2	Maxillomandibular relations.	CST	2	✓	✓
	Total		4		

COURSE NAME: SELECTION AND ARRANGEMENT OF TEETH

COURSE CODE: FJ04-CD-12

COURSE OBJECTIVES:

- 12.1 Define occlusion, centric occlusion and the balanced occlusion
- 12.2 Discuss the position of teeth in relation to the alveolar ridge
- 12.3 Describe the orientation of teeth during teeth setup

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Teeth selection and arrangement, factors responsible size, shape, color, shade and, position and relationship of teeth	LEC	1	✓	✓
2	Teeth selection and arrangement	WS	2	✓	✓
3	Teeth selection and arrangement	CST	2	✓	✓
	Total		5		

COURSE NAME: TRIAL AND INSERTION

COURSE CODE: FJ04-CD-13

COURSE OBJECTIVES:

13.1 Discuss in detail the final processing of complete dentures

13.2 List post insertion instructions

13.3 Discuss post insertion follow up

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Try in	LEC	1	✓	✓
2	Insertion Postinsertion instructions Post insertion complain	LEC	1	✓	✓
3	Relining, rebasing, repair and copy denture	LEC	2	✓	✓
4	Try in	CST	2		
5	Insertion Postinsertion instructions Post insertion complain	CST	2		
		TOTAL	8		

COURSE NAME: MISCELLANEOUS TOPICS

COURSE CODE: FJ04-CD-14

COURSE OBJECTIVES:

14.1 Define, classify and list types of immediate dentures

14.2 Indications of immediate dentures

14.3 Single complete dentures and their importance

14.4 Factors affecting single complete dentures

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Immediate dentures and Replacement dentures	LEC	1	✓	✓
2	Single complete denture	LEC	1	✓	✓
		TOTAL	2		

COURSE NAME: FIXED PROSTHODONTICS; INTRODUCTION, TYPES AND TREATMENT PLANNING

COURSE CODE: FJ04-CD-15

COURSE OBJECTIVES:

- 15.1 Learn the terminologies used in Fixed partial denture.
- 15.2 Learn the different types of crowns and their indications.
- 15.3 Learn biomechanics of FPD and partially dentate patient.
- 15.4 Learn the different parts of Fixed Partial Dentures
- 15.5 Learn the basic and advanced concept of replacement of missing tooth and teeth with FPD.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	Hrs	BCQ	OSPE
1	An introduction to fixed Prosthodontics History and examination Diagnosis and treatment planning	LEC	2	✓	✓
2	Components of Fixed partial denture Classification of Fixed Partial Denture Fixed Partial Denture types Crown and types of crowns Fixed Partial Denture Design	LEC	2	✓	✓
		TOTAL	4		

COURSE NAME: DESIGN OF FIXED PARTIAL DENTURES

COURSE CODE: FJ04-CD-16

COURSE OBJECTIVES:

- 16.1 List the design considerations for FPDs
- 16.2 Prerequisites for abutments, pontic and connectors.
- 16.3 Describe material selection for fixed prosthesis

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Abutment and retainer selection	LEC	1	✓	✓
2	Margin placement and pontic design	LEC	2	✓	✓
3	Material considerations and cementation	LEC	1	✓	✓
4	Tooth preparation	LEC	2	✓	✓
5	Tooth preparation	WS	2		
		TOTAL	8		

COURSE NAME: TEMPORIZATION OR PROVISIONAL RESTORATION

COURSE CODE: FJ04-CD-17

COURSE OBJECTIVES:

- 17.1 List ideal requirements of provisional restorations
- 17.2 Describe different materials used to fabricate provisional restorations
- 17.3 Discuss different techniques used in fabrication of provisional restorations

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Temporization	LEC	1	✓	✓
2	Temporization	WS	2	✓	✓
		TOTAL	3		

COURSE NAME: RESIN BONDED BRIDGES

COURSE CODE: FJ04-CD-18

COURSE OBJECTIVES:

- 18.1 List the different types of resin bonded bridges
- 18.2 Discuss the indications of resin bonded bridges
- 18.3 Discuss the advantages and disadvantages of resin bonded bridges

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Resin Bonded Bridges; types, indications, prerequisites, advantages and disadvantages	LEC	2	✓	✓
			2		

COURSE NAME: IMPLANTOLOGY

COURSE CODE: FJ55-PD-19

COURSE OBJECTIVES:

- 19.1 Learn the terminologies used in Implant Dentistry.

- 19.2 Learn biomechanics of Implant, teeth and edentulous arch (differential support and mobility).
- 19.3 Learn the basic and advanced concept of replacement of missing tooth and teeth with Implant.
- 19.4 Understand the physiology and pathology of bone metabolism
- 19.5 Learn the complications and their management in implant dentistry.
- 19.6 Learn the aesthetic concepts
- 19.7 Learn the digital smile makeovers

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	Hrs	BCQ	OSPE
1	Types of implants Osteointegration and biocompatibility.	LEC	1	✓	✓
2	Prosthetic options	LEC	2	✓	✓
3.	Limitation of implants	LEC	1	-	✓
4	Clinical and laboratory procedure	LEC	1	-	✓
		TOTAL	5		

COURSE NAME: MAXILLO FACIAL PROSTHESIS

COURSE CODE: FJ55-PD-20

COURSE OBJECTIVES:

- 20.1 Learn the terminologies used in Maxillofacial Prosthodontics.
- 20.2 Learn biomechanics of Maxillofacial Prosthesis and dynamic of defect area.
- 20.3 Learn the basic and advanced concept of replacement of missing tissue.
- 20.4 Learn the complications and their management.
- 20.5 Learn the importance of psychological support in rehabilitation of these patients.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	Hrs	BCQ	OSPE
1.	Classification of congenital and acquired defects. Principles governing treatment and management of patients presenting with various defects	LEC	1	✓	✓
2.	Obturator Cleft palate prosthesis	LEC	1	✓	✓
3.	Speech aid prosthesis. Facial prosthesis.	LEC	1	✓	✓
4.	TMD SPLINTS Bite raising appliance Splints and stents	LEC	1	✓	✓
		Total	4		

COURSE NAME: OCCLUSION INCLUDING TMD/MPD

COURSE CODE: FJ55-PD-21

COURSE OBJECTIVES:

- 21.1 Learn the terminologies used in Occlusion and TMJ.
- 21.2 Learn the anatomy, biomechanics of dental occlusion.
- 21.3 Learn the basic and advanced concepts of rehabilitation of edentulous jaw with CD.
- 21.4 Discuss common signs and symptoms associated with TMJ disorders and the current investigations available for the evaluation of TMJ disorders e.g. arthrography, CT,MRI
- 21.5 Enlist common pharmacological treatment options, occupational therapy, splint therapy, alternative medical therapy for pain

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	Hrs	BCQ	OSPE
1.	Theories and principles of occlusion	LEC	1	✓	✓
2.	Concept, etiology, treatment planning and options	LEC	1	✓	✓
		Total	2		

Course Name: GERODONTOLOGY

Course Code: FJ55-PD-22

LEARNING STRATEGIES, OUTCOME AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1	Effects of medication on oral health Medical conditions having oral manifestation Xerostomia Root caries Geriatric nutrition	LEC	1	✓	✓
	Total		1		

RECOMMENDED BOOKS:

REMOVABLE PROSTHODONTICS

1. Prostodontic Treatment for Edentulous Patients.(Boucher's)
George A Zarb,Charles&Bolender
1. Text Book McCracken Removable Partial Prosthodontics
2. Complete Denture Prosthodontics
John Joy Manappallil

FIXED PROSTHODONTICS

3. Text book Shillenburg Fundamentals of Fixed Prosthodontics
4. Reference book Contemporary Fixed Prosthodontics by Rosensteil.

COURSE CODE	TOPIC	TOTAL HOURS
FJ04-PD-1	INTRODUCTION TO PARTIAL DENTURES	5
FJ04-PD-2	COMPONENTS	9
FJ04-PD-3	SURVEYING	4
FJ04-PD-4	IMPRESSION TECHNIQUES	3
FJ04-PD-5	DESIGNING, FABRICATION AND DELIVERY	12
FJ04-PD-6	TYPES OF REMOVABLE PARTIAL DENTURES	1
FJ04-CD-7	COMPLETE DENTURE; INTRODUCTION TO COMPLETE DENTURES	2
FJ04-CD-8	ANATOMICAL LANDMARKS	5
FJ04-CD-9	IMPRESSION, THEORIES AND TECHNIQUES	9
FJ04-CD-10	ARTICULATION, ARTICULATORS AND FACEBOW	7
FJ04-CD-11	MAXILLO MANDIBULAR RELATIONS	4
FJ04-CD-12	SELECTION AND ARRANGEMENT OF TEETH	5
FJ04-CD-13	TRIAL AND INSERTION	8
FJ04-CD-14	MISCELLANEOUS TOPICS	2
FJ04-CD-15	FIXED PROSTHODONTICS; INTRODUCTION, TYPES AND TREATMENT PLANNING	4
FJ04-CD-16	DESIGN OF FIXED PARTIAL DENTURES	8
FJ04-CD-17	TEMPORIZATION OR PROVISIONAL RESTORATION	3
FJ04-CD-18	RESIN BONDED BRIDGES	2
FJ04-CD-19	IMPLANTOLOGY	5
FJ04-PD-20	MAXILLO FACIAL PROSTHESIS	4
FJ04-PD-21	OCCLUSION INCLUDING TMD/MPD	2
FJ04-PD-22	GERODONTOLOGY	1
	Content Taught in Lecture Hall / CST, WS, DEMO in Clinical Rotations	105
	Clinical Quota to be completed during clinical rotations: <u>Quota on patients:</u> One complete denture Three Removable partial denture <u>Clinical Quota on Model and Phantom Head:</u> Ideal Teeth Setup (complete denture) Crown Prep (Two Anterior and Four Posterior on Phantom Head) (Plastic Teeth) One Crown wax up on Models One Temporization on Dental Cast (Recorded in Logbooks)	150-160hours

4. STUDY GUIDE OPERATIVE DENTISTRY IN FINAL YEAR BDS

COURSE DESCRIPTION & RATIONALE

Operative Dentistry is one the major 4 subjects of final year BDS curriculum.

The operative curriculum is sub-divided into:

1. Basic Operative Dentistry
2. Endodontics
3. Pediatric Dentistry
4. Advance Operative Dentistry

The course is completed through various modes of information transfer throughout the whole year in the form of Lectures, Small Group Discussions, Demonstrations, Workshops & Chairside procedures.

Students will be performing clinical procedures on patients, which will be properly assessed, recorded and duly signed in the logbooks.

As a major part of final year, students learn and perform more advanced clinical procedures, treat patients, formulate treatment plans under direct supervision.

LEARNING OUTCOMES:

At the end of the year students should be able to:

1. Diagnose and manage patients with all types of carious lesions.
2. Perform amalgam, composite and GIC restorations.
3. Perform other restorative procedures such as pits and fissure sealants and PRR.
4. Diagnose and manage patients with pulpal problems.
5. Understand the concept and principles of endodontics
6. Perform root canal treatment on extracted teeth.
7. Diagnose and should know the management of Dental trauma.
8. Diagnose and manage paediatric patients.
9. Perform restorations in paediatric patients.

COURSE NAME: BASIC OPERATIVE-BIOLOGICAL CONSIDERATIONS IN OPERATIVE DENTISTRY

COURSE CODE: FJ04-OPR-01

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

1.1 Discuss the chemical composition, structure and properties of enamel, dentin, pulp, cementum and gingiva.

1.2 Discuss the morphologic and histologic structure of tooth tissues with their clinical impact on restorative dentistry.

1.3 Discuss the importance of dento-gingival complex and biologic width in restorative dentistry

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S. No	Topic	MIT	Hrs	BCQ
1	Enamel-dentine-pulp complex	SGD	4	✓
2	Cementum and gingiva	SGD		✓
3	Morphology and histology of tooth tissues	SGD		✓
4	Dentogingival complex and Biological width	SGD		✓
		Total	4	

COURSE NAME: BASIC OPERATIVE- PATIENT EVALUATION AND PROBLEM ORIENTED TREATMENT PLANNING

COURSE CODE: FJ04-OPR-02

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 2.1 Define treatment oriented treatment planning and discuss its merits and drawbacks.
- 2.2 Describe problem oriented treatment planning and its merits.
- 2.3 Discuss the correct questions regarding history and symptoms of presenting complaint.
- 2.4 Understand the importance of a thorough medical and dental history.
- 2.5 Describe and discuss elements of a clinical examination: Evaluation of dentition, evaluation of periodontium, evaluation of radiographs and evaluation of diagnostic casts and photographs.
- 2.5 Discuss esthetic parameters to be considered when restoring the dentition.
- 2.6 Understand that correct treatment sequencing is imperative for a successful treatment plan.
- 2.7 Discuss the importance of dental record keeping.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Treatment oriented & problem oriented treatment planning	SGD	4	✓	✓
2	Thorough history taking and its importance	SGD		✓	✓
3	Elements of clinical examination	CST		✓	✓
4	Esthetic parameters	LEC	1	✓ ✓	✓
5	Treatment planning and importance of correct treatment sequence	CST	3	✓	✓
6	Dental record keeping and its importance	CST	2		✓
		Total	10		

COURSE NAME: BASIC OPERATIVE- PRELIMINARY CONSIDERATIONS IN OPERATIVE DENTISTRY

COURSE CODE: FJ04-OPR-03

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 3.1 Understand the need of correct patient and operator positions when carrying out restorative procedures.
- 3.2 Discuss the ideal operating positions when carrying out various procedures.
- 3.3 Discuss the importance of isolation in operative dentistry and endodontics.
- 3.4 Enlist and describe different methods used for isolation.
- 3.5 Enlist and describe the armamentarium required for rubber dam isolation.
- 3.6 Describe and perform application and removal of rubber dam for operative dentistry and endodontics.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ
1	Correct patient and operator position while carrying out restorative procedures	DEMO	3	
2	Ideal operating positions when carrying out various procedures	DEMO		
3	Importance of isolation in operative dentistry and endodontics	DEMO		✓
4	Different methods of isolation	DEMO		✓
5	Discuss armamentarium of rubber dam assembly	DEMO	2	
6	Perform application and removal of rubber dam	WS	3	
		Total	8	

COURSE NAME: BASIC OPERATIVE- STERILIZATION AND DISINFECTION

COURSE CODE: FJ04-OPR-04

COURSE OBJECTIVES

By the end of the topic the students will be able to:

- 4.1 Define and differentiate between the following terms: Sterilization, disinfection and asepsis.
- 4.2 Discuss the importance of sterilization and disinfection.
- 4.3 Enlist elements of a sterilization plan.
- 4.4 List various methods used for sterilization.
- 4.5 Discuss methods to monitor effectiveness of sterilization.
- 4.6 List chemicals that are used for disinfection.

4.7 Discuss general considerations for infection control in the dental office.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ
1	Cross Infection Control, sterilization, disinfection and asepsis	SGD	3	✓
2	Elements of sterilization and disinfection plan	SGD		✓
3	General considerations for infection control in dental office	SGD		
4	Methods of disinfection	CST	2	✓
6	Practicing ideal sterilization and disinfection protocol	CST	2	✓
		Total	7	

COURSE NAME: BASIC OPERATIVE- ASSESSMENT OF RADIOGRAPHS

COURSE CODE: FJ04-OPR-05

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 5.1 Describe importance of radiographs in operative dentistry.
- 4.2 Identify normal anatomic structures of maxilla and mandible on a:
 - a) Periapical x-ray, Bitewing x-ray, Occlusal x-ray and Orthopantomogram (OPG).
- 5.3 Discuss the indications and limitations of the following x-rays views for diagnostic purposes:
 - a) Periapical x-ray, Bitewing x-ray, Occlusal x-ray and Orthopantomogram (OPG).

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Radiographs in dentistry	SGD	3	✓	✓
2	Identification of normal anatomic structures of maxilla and mandible	SGD		✓	✓
3	Discuss indications, limitations and diagnostic purposes of: periapical, bitewing, occlusal and orthopantomogram	SGD		✓	✓
4	How to take paralleling periapical on patients using endo-ray	CST	3	✓	✓
		Total	6		

COURSE NAME: BASIC OPERATIVE- DENTAL CARIES: ETIOLOGY AND CLINICAL CHARACTERISTICS

COURSE CODE: FJ04-OPR-06

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 6.1 Define dental caries, discuss etiology and pathogenesis of dental caries.
- 6.2 Describe factors influencing dental caries process.
- 6.3 Discuss role of plaque biofilm in progression of dental caries.
- 6.4 Describe microorganisms responsible for dental caries.
- 6.5 Describe the Stephan's curve.
- 6.6 Describe clinical characteristics and progression of carious lesions as seen on:
 - a) Pit and fissures, smooth surfaces and root surfaces.
- 6.7 Describe the progression and different zones of carious lesions in Enamel and dentin.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ
1	Caries, etiology and pathogenesis	LEC	2	✓
2	Role of influencing factors, microorganisms involved and the process of caries	LEC		✓
3	Stephen's Curve	SGD	2	✓
4	Characteristics, progression and zones of dental caries on pits and fissures, smooth surfaces and root surfaces of both enamel and dentin	SGD		✓
		Total	4	

COURSE NAME: BASIC OPERATIVE- DENTAL CARIES: DIAGNOSIS AND MANAGEMENT

COURSE CODE: FJ04-OPR-07

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 7.1 Discuss methods of detection and diagnosis of dental caries.
- 7.2 Describe International Caries Detection and Assessment System (ICDAS II).
- 7.3 Discuss how to assess dental caries risk for a patient & discuss Caries
- 7.4 Management by Risk Assessment (CAMBRA).
- 7.5 Discuss protocols and strategies for prevention of dental caries and non-invasive options for treatment of existing lesions.
- 7.6 Define caries control restorations and describe the clinical protocol for caries control restorations.
- 7.7 Understand the need to devise a logical treatment plan sequence for restoring a patient's dentition.
- 7.8 Discuss maintenance care and recall visit intervals for individuals based on risk assessment.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Detecting and diagnosing dental caries	LEC	1	✓	✓
2	Understand the ICDAS II and dental risk assessment by CAMBRA	LEC		✓	✓
3	Protocols for caries prevention, non-invasive treatment of caries	SGD	5	✓	✓
4	Caries control protocol for caries control restorations	SGD		✓	✓
5	Treatment plan sequence and post-operative maintenance	SGD		✓	✓
		Total	6		

COURSE NAME: BASIC OPERATIVE- DENTAL CARIES: MANAGEMENT OF DEEP CARIOUS LESION**COURSE CODE: FJ04-OPR-08****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 8.1 Discuss the various possible reactions of the pulp-dentin complex to a deep carious lesion.
- 8.2 Define:
 - a) Stepwise excavation, Indirect pulp cap & Direct pulp cap (caries and iatrogenic).
- 8.3 Discuss the rationale of stepwise excavation.
- 8.4 Enumerate materials that can be used for direct and indirect pulp cap.
- 8.5 Describe the clinical protocol for direct and indirect pulp cap procedures.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.No	Topic	MIT	Hrs	BCQ	OSCE
1	Effect of deep carious lesions on pulp-dentine complex	SGD	2	✓	
2	Stepwise excavation, Indirect pulpcap& direct pulpcap	SGD	1	✓	
3	Materials used in direct and indirect pulpcap	CST	6	✓	✓
4	Clinical protocol and procedure of direct and indirect pulpcap	CST		✓	✓
		Total	9		

COURSE NAME: BASIC OPERATIVE- DENTAL CARIES: NOMENCLATURE, PRINCIPLES OF CAVITY DESIGN AND PREPARATION.**CLASS I- CLASS VI**

COURSE CODE: FJ04-OPR-09**COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 9.1 Describe different systems for naming and numbering teeth.
- 9.2 Describe the nomenclature of tooth surfaces and cavity preparation.
- 9.3 Explain classification of caries lesions and tooth preparation.
- 9.4 Describe the objectives of tooth preparation.
- 9.5 Enlist factors that need to be considered before tooth preparation.
- 9.6 Describe the steps in the initial and final stages of tooth preparation.
- 9.7 Identify shortcomings of Black's cavity classification.
- 9.8 Describe the advances in material sciences that, have made cavity preparation minimally invasive.
- 9.9 Plan restorations in different clinical situations.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.No	Topic	MIT	Hrs	BCQ
1	Different systems to name and number teeth	SGD	3	✓
2	Nomenclature of tooth surfaces and classification of cavity preparations	SGD		✓
3	Tooth preparation: objectives, factors to consider & stages	SGD	3	✓
4	Recent advances in material sciences & conservative cavity preparation	SGD		✓
5	Planning restorations	SGD		✓
		Total	6	

COURSE NAME: BASIC OPERATIVE-INSTRUMENTS AND EQUIPMENT FOR TOOTH PREPARATION**COURSE CODE: FJ04-OPR-10****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 10.1 Enlist hand and rotary instruments used for tooth preparation.
- 10.2 List various cutting and noncutting hand instruments.
- 10.3 Discuss the design features for hand cutting instruments.
- 10.4 Discuss the nomenclature for hand cutting instruments.
- 10.5 Describe sharpening of hand instruments.
- 10.6 Describe the various instrument grasp techniques that can be employed.
- 10.7 Enlist and describe rotary cutting equipment and instruments.
- 10.8 Discuss common design characteristics of rotary cutting instruments (dental burs).
- 10.9 Discuss latest developments for tooth preparation and caries removal including:
 - a) Lasers, Ozone & Air abrasion.
- 10.10 Discuss hazards with cutting instruments and their prevention.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Hand and rotary instruments, cutting and non-cutting instruments	DEMO	1	✓	
2	Nomenclature, features and hazards of cutting instruments	DEMO		✓	
3	Designs and characteristics of rotatory equipment and characteristics	DEMO	3	✓	
4	Recent advances in laser, ozone and air abrasion in tooth preparation	SGD		✓	
		Total	5		

COURSE NAME: BASIC OPERATIVE- REVIEW OF RESTORATIVE MATERIALS**COURSE CODE: FJ04-OPR-11****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

11.1 Discuss the composition, properties, merits and shortcomings of materials used for direct restorations:

- a) Amalgam
- b) GIC
- c) Composite

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Amalgam	LEC	1	✓	✓
2	GIC	LEC	1	✓	✓
3	Composite	LEC	1	✓ ✓	✓
		Total	3		

COURSE NAME: BASIC OPERATIVE- AMALGAM RESTORATIONS**COURSE CODE: FJ04-OPR-12****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 12.1 Discuss chemistry of dental amalgam, mercury hazards and hygiene.
- 12.2 List advantages and disadvantages of amalgam restorations.

- 12.3 Describe class 1 cavity preparation and explain the outline form of a class 2 cavity.
 12.4 Discuss ways of improving resistance and retention form of a simple class 1 and 2 restoration.
 12.5 Define complex restorations and ways of improving resistance and retention form of complex restorations.
 12.6 Describe the need for cuspal coverage with special reference to rule of thirds.
 12.7 Describe types of dentin pin and the method of placement of dentin pins.
 12.8 Describe other mechanical features to improve resistance and retention.
 12.9 Discuss importance of matrices and wedges, list various types of matrix band systems and list various parts of tofflemire and describe the method of using a tofflemire.
 12.10 Describe bonded amalgam restorations and the mechanism of amalgam bonding.
 12.11 Describe placement of amalgam in simple and complex cavities.
 12.12 Discuss other cavity preparation designs e.g. box only preparation, tunnel preparation.
 12.13 Discuss cavity preparation and restoration of a class 6 lesion.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Introduction to amalgam restorations	LEC	1	✓	✓
2	Clinical techniques involving class 1 and 2 amalgam restorations	CST	13	✓	✓
3	Resistance and retention form	LEC	1	✓	✓
4	Amalgam bonding	LEC		✓	✓
5	Complex restorations	LEC		✓	✓
6	Class 6 restorations	LEC		✓	✓
		Total	15		

COURSE NAME: BASIC OPERATIVE- BONDING TO ENAMEL AND DENTIN
COURSE CODE: FJ04-OPR-13

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 13.1 List advantages of adhesive techniques over conventional, non-adhesive methods.
 13.2 Describe the structure of enamel and explain why it is a favorable substrate for bonding.
 13.3 Describe the structure of dentin and explain how it is different from enamel.
 13.4 Discuss the effect of smear layer on dentin bonding.
 13.5 Explain the effect of Configuration Factor (C-factor) on bonding.
 13.6 List scientific classification of modern adhesives.
 13.7 Describe smear layer modifying adhesives.
 13.8 Discuss etch and rinse adhesives.
 13.9 Explain the effect of acid conditioning on enamel.
 13.10 Discuss difficulties in dentine conditioning.
 13.11 Discuss chemistry of primers and adhesive resin (bonding agent).
 13.12 Explain the importance of hybridization for effective dentine bonding.
 13.13 Discuss self-etch adhesives, describe 4th, 5th 6th and 7th generation adhesives.
 13.14 Explain steps involved in enamel bonding and dentin bonding.
 13.15 Describe the bond strength under optimal conditions.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Basic concepts in adhesion	LEC	1	✓	✓
2	Enamel adhesion	LEC		✓	✓
3	Dentine adhesion	LEC	1	✓	✓
4	Generations of etchants and primers	LEC		✓	✓
5	Outcomes of enamel and dentine bonding	LEC		✓	✓
6	Bonding Technique	SGD	4	✓	✓
		Total	6		

COURSE NAME: BASIC OPERATIVE-DIRECT ANTERIOR COMPOSITE RESTORATIONS**COURSE CODE: FJ04-OPR-14****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 14.1 Discuss the chemistry of anterior composites.
- 14.2 Describe preoperative evaluation for an anterior composite restoration.
- 14.3 Describe factors influencing shade selection, guidelines and methods of shade matching.
- 14.4 Describe cavity preparation for class 3 restorations and class 4 restorations.
- 14.5 Explain composite placement technique for class 3 and 4 restorations.
- 14.6 List indications, contraindications, advantages, disadvantages and clinical steps of direct composite veneers.
- 14.7 Explain the technique for diastema closure with direct composite.
- 14.8 Discuss different instruments used for finishing and polishing of composite restorations and their use.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Chemistry of anterior composites	LEC	2	✓	
2	Shade selection	LEC		✓	✓
3	General consideration for composite restorations	WS	3	✓	✓
4	Instruments for composite restorations	WS		✓	✓
5	Class III and IV cavity preparation	CST	13	✓	✓
		Total	15		

COURSE NAME: BASIC OPERATIVE- DIRECT POSTERIOR COMPOSITE RESTORATIONS**COURSE CODE: FJ04-OPR-15****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 15.1 Enumerate indications, contraindications, advantages and disadvantages for composite resin as a posterior restorative material.
- 15.2 Describe preoperative evaluation for a posterior composite restoration.
List factors affecting retention of fissure sealants.
- 15.3 Describe placement technique for preventive resin restoration.
- 15.4 Explain the importance of pre-wedging in class 2 composites & outline form of a class 2 cavity.
- 15.5 Explain bonded base technique.
- 15.6 Classify matrix systems for composite restorations, compare circumferential and sectional matrix systems.
- 15.7 Discuss different methods to minimize polymerization shrinkage when placing composite.
- 15.8 List different methods to create a tight contact for class 2 composite restorations.
- 15.9 List various resin polymerization equipment.
- 15.10 Discuss other cavity preparation designs e.g. box only preparation, tunnel preparation.
- 15.11 Discuss cavity preparation and restoration of a class 6 lesion.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	General consideration of posterior restorative material	LEC	2	✓	✓
2	Pits and fissure sealants	LEC		✓	✓
3	Clinical techniques for posterior restorations	WS	4	✓	✓
4	Concepts of polymerization shrinkage			✓	✓
5	Matrix systems and methods of achieving tight interproximal contacts			✓	✓
6	Cavity design and preparation			✓	✓
7	Cavity Designs	SGD	2	✓	✓
		Total	7		

COURSE NAME: BASIC OPERATIVE-TOOTH SURFACE LOSS**COURSE CODE: FJ04-OPR-16****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

16.1 Define the following types of tooth surface loss:

- a) Abrasion
- b) Attrition
- c) Erosion,
- d) Abfraction

16.2 Discuss the etiology of each.

16.3 Discuss the prevention and management of tooth surface loss.

16.4 List etiology, pathogenesis and management of dentine hypersensitivity.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Define abrasion, attrition, erosion and abfraction	LEC	1	✓	✓
2	Causes of non-carious tooth loss	LEC		✓	✓
3	Prevention and management	LEC	1	✓	✓
4	Dentine hypersensitivity	LEC		✓	✓
5	Tooth wear and management	SGD	2	✓	✓
		Total	4		

COURSE NAME: BASIC OPERATIVE-DISCOLORATION OF TEETH

COURSE CODE: FJ04-OPR-17

LEARNING OBJECTIVES:

By the end of the topic the students will be able to:

17.1 Describe causes of tooth discoloration and describe nature of stains.

17.2 Describe mode of action of bleaching agent on stains.

17.3 Enlist commonly used bleaching agents and their strengths.

17.4 Enlist indications and contraindications of various types of bleaching techniques.

17.5 Explain technique for:

- a. In-office vital bleaching
- b. At-home vital bleaching
- c. Non-vital bleaching.

17.6 Describe the procedure for micro abrasion and macro abrasion.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Tooth discoloration : classification and etiology	LEC	1	✓	✓
2	Tooth bleaching : MOA and different agents	LEC		✓	✓

3	Techniques for bleaching: advantages, disadvantages and procedures.	LEC		✓	✓
		Total	1		

COURSE NAME: ADVANCE OPERATIVE- CLASS 5 RESTORATIONS

COURSE CODE: FJ04-OPR-18

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 18.1 Describe cavity preparation for class 5 restorations.
- 18.2 Describe non-surgical and surgical techniques for isolating class 5 restorations.
- 18.3 Discuss restorative materials available for restoring class 5 lesions.
- 18.4 List ways of improving retention of class 5 composite restorations.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Class 5 cavity preparations	WS	3	✓	✓
2	Isolation techniques	LEC		✓	✓
3	Restorative materials for class 5	LEC	1	✓	✓
4	Retention in class 5 lesions	LEC		✓	✓
		Total	4		

COURSE NAME: ADVANCE OPERATIVE- DIAGNOSIS AND TREATMENT OF ROOT CARIES

COURSE CODE: FJ04-OPR-19

LEARNING OBJECTIVES:

By the end of the topic the students will be able to:

- 19.1 Define root caries.
- 19.2 Describe appearance and location of root caries.
- 19.3 List etiology and risk factors associated with root caries.
- 19.4 Discuss preventive and chemotherapeutic strategies to treat root caries.
- 19.5 Discuss available restorative materials for treating root caries.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Overview of root caries	LEC	1	✓	✓
2	Causes and risk factors	LEC		✓	✓
3	Restorative materials for root caries	LEC	1	✓	✓
4	Prevention and application	LEC		✓	✓
		Total	2		

COURSE: ADVANCE OPERATIVE-REVIEW OF RESTORATIVE MATERIALS FOR INDIRECT RESTORATIONS**COURSE CODE: FJ04-OPR-20****COURSE OBJECTIVES:****By the end of the topic the students will be able to:**

20.1 Discuss the composition, properties, merits and shortcomings of materials used for indirect restorations:

- Metals,
- Ceramics.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Metal as material for indirect restorations	SGD	4	✓	✓
2	Ceramic as material for indirect restorations	SGD		✓	✓
		Total	4		

COURSE NAME: ADVANCE OPERATIVE-PARTIAL COVERAGE INDIRECT RESTORATIONS**COURSE CODE: FJ04-OPR-21****COURSE OBJECTIVES:****By the end of the topic the students will be able to:**

- 21.1 Enlist various partial and full coverage indirect restorations.
- 21.2 Describe the principles of tooth preparation for indirect restorations.
- 21.3 Describe the indications and contraindications for provision of: Inlay and Onlay.
- 21.4 Describe the clinical assessment required and the steps of preparation for: Inlay and Onlay.
- 21.5 List materials available for these restorations.

- 21.6 Discuss soft tissue management and impression making for inlays and onlays.
 21.7 Discuss laboratory steps for these restorations.
 21.8 Enlist the materials used for cementation.
 21.9 Describe the clinical procedure for cementation.
 21.10 Discuss the latest innovations including CAD-CAM technology.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Partial and full coverage indirect restorations	SGD	3	✓	✓
				✓	
2	Inlays: indications, contraindications and tooth preparation	WS		✓	✓
3	Onlays: indications, contraindications and tooth preparation	WS		✓	✓
4	Steps, materials, soft tissue management and impression making	WS	3	✓	✓
		Total	6		

COURSE NAME: ADVANCE OPERATIVE-PORCELAIN VENEERS

COURSE CODE: FJ04-OPR-22

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 22.1 Discuss indications and contraindications for veneers.
 22.2 Describe the diagnostic procedures involved in treatment planning.
 22.3 Explain the importance of quality and quantity of enamel for predictable bonding.
 22.4 Describe tooth preparation, soft tissue management and impression making for veneers.
 22.5 Describe methods of temporization.
 22.6 Describe step by step procedure of veneer placement.
 22.7 Describe the importance of silane coupling agent and hydro fluoric acid.
 22.8 Identify techniques for intra oral repair of indirect restorations.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Veneers: indications, contraindications, tooth preparation, impression making and placement	WS	3	✓	✓

2	Effects of enamel quality, quality, silane-coupling agent and hydrofluoric acid on bond strength	WS		✓	✓
3	Intra-oral repair of indirect restorations	SGD	3	✓	✓
4	Temporization	SGD		✓	✓
		Total	6		

COURSE NAME: ENDODONTICS - BIOLOGY OF DENTAL PULP AND PERIRADICULAR TISSUE

COURSE CODE: FJ04-OPR-23

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 23.1 Recognize the anatomic regions of the pulp and their clinical importance.
- 23.2 Describe the functions of the pulp-dentin complex.
- 23.3 Describe the blood vessels and lymphatics of pulp.
- 23.4 List the neural components of pulp and describe their distribution and function.
- 23.5 Discuss theories of dentin sensitivity.
- 23.6 Describe the pathway of efferent nerves from the pulp to central nervous system.
- 23.7 Describe changes in pulp morphology with age.
- 23.8 Describe the structure and function of periradicular tissues.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Pulp-Dentine Complex: anatomy, development and function	LEC	1	✓	
2	Extracellular matrix, lymphatics and blood supply of pulp	LEC		✓	
3	Neural components and nerve pathways of the pulp	LEC		✓	
4	Dentin sensitivity	LEC		✓	
5	Age changes in pulp morphology	LEC		✓	
		Total	1		

COURSE NAME: ENDODONTICS - PRESERVING PULP VITALITY**COURSE CODE: FJ04-OPR-24****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

24.1 Understand physiologic and structural characteristics of pulp and how it affects pulp response to injury.

24.2 Discuss iatrogenic effects on the dental pulp by:

24.3 Local anesthetics with vasoconstrictor, cavity/ crown preparation (thermal shock), Depth of cavity preparation, various restorative materials, placement of pins, polishing restorations, post-restoration hypersensitivity, orthodontic tooth movement and vital bleaching.

24.4 Discuss the formation and role of tertiary dentin in pulp protection.

24.5 Discuss preventive measures during dental restorative procedures to preserve pulp vitality.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Pulp Injuries	LEC	1	✓	
2	Iatrogenic effects of dental operative procedures on pulp	LEC		✓	
3	Role of tertiary dentin in pulp protection	LEC		✓	
4	Preventive measures to prevent pulp vitality	LEC		✓	
5	Pulpal Vitality Testing	WS	3	✓	
		Total	4		

COURSE NAME: ENDODONTICS - ENDODONTIC MICROBIOLOGY**COURSE CODE: FJ04-OPR-25****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

25.1 Describe the routes of entry of microorganisms to the pulp and periradicular tissues.

25.2 Discuss the different types of endodontic infections.

25.3 Describe the various microbial species involved in different types of endodontic infections.

25.4 Discuss ecology of endodontic microbiota and features of endodontic ecosystem.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Microorganisms involved and routes of entry in pulpal infections	LEC	1	✓	
2	Types of endodontic infections	LEC		✓	
3	Microbial species and ecology of microbiota	LEC		✓	
4	Endodontic ecosystem	LEC		✓	
		Total	1		

COURSE NAME: ENDODONTICS - PULP AND PERIRADICULAR PATHOSIS**COURSE CODE: FJ04-OPR-26****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 26.1 Identify etiological factors of pulp inflammation.
- 26.2 Explain mechanism of spread of inflammation in the pulp.
- 26.3 Explain why the pulp has difficulty in recovering from severe injury.
- 26.4 List specific and non-specific indicators of pulpal inflammation.
- 26.5 Classify pulpal diseases along with their clinical and histological features.
- 26.6 Describe the mechanisms and explain consequences of spread of pulpal inflammation into periradicular tissues.
- 26.7 Classify periradicular lesions of pulpal origin along with their clinical and histological features.
- 26.8 Describe steps involved in repair of periapical pathosis after successful root canal treatment.
- 26.9 Identify and describe non-endodontic lesions that may simulate endodontic periradicularpathosis.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Pulpal inflammation : etiology, mechanism and recovery	LEC	1	✓	
2	Pulpal diseases: classification, clinical and histological features	LEC		✓	✓
3	Periradicular lesions: classification, origin, spread and features	LEC	1	✓	✓
4	Repair of periapical pathosis	LEC		✓	✓
5	Non-endodontic lesions	LEC		✓	✓
6	Pulp and Periapical classification and diagnosis	SGD	4	✓	✓
		Total	6		

COURSE NAME: ENDODONTICS - ENDODONTIC DIAGNOSIS AND TREATMENT PLAN**COURSE CODE: FJ04-OPR-27****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 27.1 Discuss the correct questions regarding history and symptoms of presenting complaint.
- 27.2 Understand the importance of a thorough medical and dental history.
- 27.3 Perform complete extra and intraoral examination to ascertain pulpal and periapical health.
- 27.4 Describe various vitality tests, interpret their findings and understand their limitations.
- 27.5 Correlate radiographic findings to the history and clinical examination.
- 27.6 Discuss the common medical diseases that may influence endodontic treatment planning.
- 27.7 Discuss special considerations when planning treatment for geriatric patients.
- 27.8 Consolidate all the data to formulate a diagnosis and treatment plan.
- 27.9 Discuss the importance of an informed consent before any treatment.
- 27.10 Understand the importance of referral to an endodontist in certain cases.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Thorough medical and dental history taking	Lec	1	✓	✓
2	Extraoral, intraoral examination and pulp vitality testing	WS	1	✓	✓
3	Correlation of radiographic finding to clinical examination	WS	2	✓	✓
5	Formulate a diagnosis and treatment plan	WS		✓	✓
		Total	4		

COURSE NAME: ENDODONTICS - ENDODONTIC RADIOLOGY**COURSE CODE: FJ04-OPR-28****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 28.1 Describe importance of radiographs in endodontics.
- 28.2 Identify normal anatomic structures of maxilla and mandible on radiograph.
- 28.3 Describe radiographic characteristics to differentiate between endodontic and non-endodontic radiolucencies and radioopacities.
- 28.4 Describe radiographic characteristics of periapical lesion of endodontic origin.

- 28.5 Describe reasons for varying horizontal and vertical cone angulations to create image shift.
 28.6 Describe the SLOB rule.
 28.7 Describe new technologies for radiographic imaging.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Types of Radiographs, their indications and findings	LEC	1	✓	✓
2	Endodontic and non-endodontic radiolucencies	WS	2	✓	✓
3	X-ray techniques and the SLOB rule	WS	1	✓	✓
4	New technologies in radiographic imaging	WS		✓	✓
		Total	4		

COURSE NAME: ENDODONTICS - PULP ANATOMY

COURSE CODE: FJ04-OPR-29

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 29.1 Understand the relationship of shape of pulp system to root anatomy.
 State laws of canal orifice location.
 29.2 List and recognize significance of iatrogenic or pathologic factors that may cause alterations in pulp anatomy.
 29.3 Define pulp space and list and describe its major components.
 29.4 Describe variations in the pulp system in apical third.
 29.5 Describe how to determine clinically the distance from occlusal/incisal surface to the roof of chamber.
 29.6 Describe accessory canals.
 29.7 Describe relationship between anatomic, radiographic and actual location of apical foramen.
 29.8 Describe common variations in pulp anatomy resulting from developmental abnormalities.
 29.9 Describe changes in pulp anatomy that occur with age.
 29.10 Draw a representative example of the most common internal and external anatomy of each tooth in sagittal section and in cross section.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Pulp system and root anatomy	LEC	1	✓	
2	Changes in pulpal anatomy and laws of orifice location	LEC		✓	
3	Apical third and accessory canals	LEC		✓	
4	Apical foramen: anatomic, radiographic and actual location	LEC		✓	
5	Internal and external anatomy of each tooth	LEC		✓	
6	Age changes in pulp anatomy	LEC		✓	
7	Pulpal Anatomy	SGD	4	✓	
		Total	5		

COURSE NAME: ENODONTICS - INSTRUMENTS IN ENDODONTICS**COURSE CODE: FJ04-OPR-30****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 30.1 Define a basic set of instruments appropriate for various endodontic procedures.
- 30.2 Describe the general physical properties of instruments.
- 30.3 Describe the design of common canal preparation instruments and their mode of use.
- 30.4 Explain the basis for sizing and taper of hand operated instruments.
- 30.5 Describe proper use of instruments to prevent breakage within canal.
- 30.6 Recognize visible changes in instruments that will predispose to breakage.
- 30.7 Describe techniques for sterilization and disinfection.
- 30.8 Describe nickel titanium rotary instruments.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Endodontic instruments: properties, design and mode of use	DEMO	2	✓	✓
2	Proper protocol of using instruments to prevent breakage	DEMO		✓	✓
3	Hand instruments: sizing, taper and visible changes	DEMO	1	✓	✓
4	Ni-Ti rotary instruments	DEMO		✓	✓
		Total	3		

COURSE NAME: ENDODONTICS - LOCAL ANESTHESIA IN ENDODONTICS**COURSE CODE: FJ04-OPR-31****COURSE OBJECTIVES:****By the end of the topic the students will be able to:**

- 31.1 Define pain threshold and the factors affecting pain threshold.
- 31.2 List techniques that are helpful in giving "painless" injections.
- 31.3 Describe the "routine" approach to conventional local anesthesia.
- 31.4 Describe circumstances that create difficulties in obtaining profound anesthesia.
- 31.5 Describe when to use supplemental methods of obtaining pulpal anesthesia.
- 31.6 Review techniques of intraosseous, periodontal ligament, and intrapulpal injections.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ
1	Pain threshold: definition and factors affecting pain	LEC	1	✓
2	Painless injecting techniques	LEC		✓
3	Conventional approaches of local anesthesia	SGD	6	✓
4	Circumstances hindering in obtaining effective anesthesia	SGD		✓
5	Supplemental, intraosseous, intraligamentary and intrapulpal techniques	SGD		✓
		Total	7	

COURSE NAME: ENDODONTICS - ISOLATION, ENDODONTIC ACCESS, AND LENGTH DETERMINATION**COURSE CODE: FJ04-OPR-32****COURSE OBJECTIVES:****By the end of the topic the students will be able to:**

- 32.1 Discuss methods of isolation in endodontics with emphasis on rubber dam isolation.
- 32.2 Describe importance of pre-operative assessment as pre-requisite for treatment success.
- 32.3 Discuss the importance of pre-endodontic buildup.
- 32.4 Describe the objectives of access cavity preparation.
- 32.5 Describe the general principles of endodontic access cavity.
- 32.6 Describe the procedure, armamentarium and sequence for access cavity preparation.
- 32.7 Describe and draw outline of access cavity of each tooth.
- 32.8 Describe average length and canal configuration of various teeth.
- 32.9 Describe technique for locating canal orifices.
- 32.10 Identify errors during access and know how to correct them.
- 32.11 Describe various methods of working length determination.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Isolation : methods and importance of rubber dam placement	LEC	1	✓	✓
2	Access cavity: objectives, principles, procedure and sequence	WS	3	✓	✓
3	Canal configuration of various teeth	LEC	1	✓	✓
4	Methods of locating canal orifices	LEC		✓	✓
5	Methods of working length determination	WS	3	✓	✓
		Total	8		

COURSE NAME: ENDODONTICS - CLEANING AND SHAPING**COURSE CODE: FJ04-OPR-33****COURSE OBJECTIVES:****By the end of the topic the students will be able to:**

- 33.1 Describe why infection of pulp space is different from other tissues of body.
- 33.2 Identify purpose of cleaning the pulp space.
- 33.3 Describe purpose of shaping along with the mechanical objectives.
- 33.4 Understand and explain the concept of apical patency.
- 33.5 Describe basic and combined instruments movements.
- 33.6 Describe different techniques of canal preparation.
- 33.7 Explain step-back and crown-down technique.
- 33.8 Explain how to minimize preparation errors in curved canal.
- 33.9 Discuss management of calcified canals.
- 33.10 Discuss NiTi rotary instruments and its efficacy over SS files.
- 33.11 Explain the importance of irrigants.
- 33.12 List properties of an ideal irrigant and name various agents used.
- 33.13 Describe irrigation techniques that provide maximum irrigant effect.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Objectives and principles of cleaning and shaping	LEC	2	✓	✓
2	Basic and combined instrument movements for canal preparation	WS	2	✓ ✓	✓

3	Differentiate between step-back and crown-down techniques	WS	2	✓	✓
4	Differentiate between SS and Ni-Ti files	LEC	1	✓	✓
5	Irrigants : ideal properties and various agents	LEC		✓	✓
		Total	7		

COURSE NAME: ENDODOTICS - INTRA CANAL MEDICAMENTS AND TEMPORARY FILLING MATERIALS

COURSE CODE: FJ04-OPR-34

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 34.1 Name different microorganisms involved in endodontic pathosis.
- 34.2 Define intra canal medicament.
- 34.3 Discuss the properties and role of intra-canal, inter-appointment medicaments.
- 34.4 Categorize and name various agents used as intra-canal medicament.
- 34.5 Describe the method of application and instruments used in intra-canal medication.
- 34.6 List temporary filling materials used and describe techniques for their placement and removal.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Define Intracanal medicament, their properties and role in endodontics	LEC	1	✓	✓
2	Categorization and classification of various intracanal medicaments	LEC		✓	✓
3	Methods of applying medicaments and instruments used	LEC		✓	✓
4	List temporary filling materials and techniques used for their placement and removal	LEC		✓	✓
		Total	1		

COURSE NAME: ENDODONTICS - ROOT CANAL OBTURATION

COURSE CODE: FJ04-OPR-35

LEARNING OBJECTIVES:

By the end of the topic the students will be able to:

- 35.1 Describe the purpose of obturation and reasons why inadequate obturation may result in treatment failure.
- 35.2 Recognize the clinical criteria that determines time of obturation.
- 35.3 List the properties of ideal obturation material.
- 35.4 Name core obturation materials.
- 35.5 Describe the composition and properties of guttapercha.
- 35.6 Describe advantages and disadvantages of each core material.
- 35.7 List properties of ideal sealer and understand the need for using a sealer.
- 35.8 Name various types of sealers.
- 35.9 Name different types of obturation techniques.
- 35.10 Describe lateral condensation technique.
- 35.11 Describe briefly other techniques used for obturation.
- 35.12 Discuss the clinical and radiographic criteria for evaluating the quality of obturation.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Purpose of obturation and drawbacks of inadequate obturation	LEC	1	✓	✓
2	Ideal properties of obturating material and different core obturation materials	LEC		✓	✓
3	Composition and properties of guttapercha	LEC	1	✓	✓
4	Ideal properties of sealer and significance of using sealer	LEC		✓	✓
5	Describe different obturation techniques and methods	WS	3	✓	✓
6	Describe criteria of evaluating quality of obturation	WS		✓	✓
		Total	5		

COURSE NAME: ENDODONTICS - PROCEDURAL ACCIDENTS

COURSE CODE: FJ04-OPR-36

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 36.1 Recognize procedural accidents and describe their causes, prevention and treatment during:
- Access cavity preparation, cleaning and shaping and obturation.
- 36.2 Define and describe the following errors including their management:
- Transportation, ledge formation, elbow and zipping
 - Root perforations- apical, middle and coronal, separated instruments, aspiration and ingestion
 - Hypochlorite accident and air emphysema.

36.3 Discuss how procedural errors can affect the prognosis of treatment.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Procedural Accidents: types, causes, prevention and management	LEC	1	✓	✓
2	Prognosis of Treatment with Procedural accidents	LEC	1	✓	✓
3	Procedural Accidents	SGD	4	✓	✓
		Total	6		

COURSE NAME: ENDODONTICS - ENDODONTIC EMERGENCIES

COURSE CODE: FJ04-OPR-37

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

37.1 Identify causes of emergencies before treatment, inter-appointment and after obturation.

37.2 Describe emotional status of emergency patient and explain how this complicates diagnosis and treatment.

37.3 Explain the importance of sequential approach to endodontic emergencies:

- a) Determine source of pain, establish a pulpal and periapical diagnosis, design an emergency (short term) treatment plan and design a long term treatment plan.

37.4 Describe how to manage various endodontic emergencies including:

- a) Painful irreversible pulpitis, necrotic pulp with acute apical periodontitis, acute apical abscess and acute apical periodontitis.

37.5 Recognize inter-appointment and post-obturation flareups and describe their management.

37.6 Discuss pharmacological therapy used in emergency and its role in controlling pain and infection.

37.7 Understand the indications and contraindications for prescribing analgesics, antibiotics, anti-inflammatory agents and anxiolytics.

37.8 Discuss development of a treatment plan consisting of appropriate endodontic and pharmacologic strategies for managing pain, anxiety, and infection.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Endodontic emergencies: identify causes, time of occurrence and management	LEC	1	✓	✓
2	Sequential approach in managing emergency patient	LEC		✓	✓
3	Flare-ups: interappointment and postoperative management	LEC	1	✓	✓

4	Indications and contraindications of pharmacological management	LEC		✓	✓
5	Combining pharmacological and endodontic therapies to manage pain, anxiety and infection	LEC		✓	✓
6	Endodontic Emergencies	SGD	4	✓	✓
		Total	6		

COURSE NAME: ENDODONTICS - RESTORATION OF ENDODONTICALLY TREATED TOOTH

COURSE CODE: FJ04-OPR-38

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 38.1 Explain why endodontically treated teeth are different from vital teeth.
- 38.2 Explain the importance of coronal seal.
- 38.3 Discuss options available for restoring endodontically treated teeth.
- 38.4 Explain ferrule effect.
- 38.5 Describe indications of post placement in anterior and posterior teeth.
- 38.6 Describe Nayyar Core.
- 38.7 Describe ideal dimensions of a post.
- 38.8 Describe common post systems, their advantages and disadvantages.
- 38.9 Describe method of placement of prefabricated and cast post.
- 38.10 Describe core materials and their placement.
- 38.11 Discuss complications that can occur during placement of post.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Identify and compare endodontically treated and vital teeth	LEC	2	✓	✓
2	Different options for restoring endodontically treated teeth	LEC		✓	✓
3	Ferrule effect	WS	3	✓	✓
4	Core materials and nayyar core	WS		✓	✓
5	Posts: systems, indications, contraindications, ideal dimensions, advantages, disadvantages and complications associated with placement	WS		✓	✓
		Total	5		

COURSE NAME: ENDODONTICS - NONSURGICAL ENDODONTIC RETREATMENT**COURSE CODE: FJ04-OPR-39****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 39.1 State rationale and indications of endodontic retreatment.
- 39.2 Describe the alternates to endodontic retreatment.
- 39.3 Describe technique of accessing through extra coronal restorations.
- 39.4 Describe technique of removing crowns and posts.
- 39.5 Identify various types of canal obstructions and describe their management.
- 39.6 Describe the techniques for guttapercha removal.
- 39.7 Explain the role of intra-canal medicament in retreatment.
- 39.8 Discuss prognosis of retreatment.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Endodontic Retreatment: Indications, techniques and alternative techniques	LEC	1	✓	✓
2	Access through extracoronar restorations, removal of crowns and posts	LEC		✓	✓
3	Guttapercha removal	LEC	1	✓	✓
4	Intracanal medicaments in retreatment	LEC		✓	✓
5	Prognosis of retreatment	LEC		✓	✓
6	Endodontic Retreatment	SGD	4	✓	✓
		Total	6		

COURSE NAME: ENDODONTICS - ENDODONTIC SURGERY**COURSE CODE: FJ04-OPR-40****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 40.1 Discuss the role of endodontic surgery alone or in combination with nonsurgical root canal therapy.
- 40.2 Recognize situations when endodontic surgery is contraindicated.
- 40.3 Define the terms:
 - b) Incision for drainage, apical curettage, root-end resection, root-end preparation, root-end filling, root amputation, hemisection and bicuspidization.
- 40.4 Discuss indications for the above mentioned procedures.
- 40.5 State principles of flap design.
- 40.6 Illustrate various flap designs.
- 40.7 Describe in brief, step by step procedures involved in peri-radicular surgery.
- 40.8 Discuss prognosis of endodontic surgical cases.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Endodontic surgery: indications, contraindications and procedures	LEC	1	✓	✓
2	Terminology in endodontic surgery	LEC		✓	✓
3	Flap design: classifications and principles	LEC		✓	✓
4	Peri-radicular surgery	LEC		✓	✓
5	Prognosis of endodontic surgery	LEC		✓	✓
6	Endodontic Surgery	SGD	5	✓	✓
		Total	6		

COURSE NAME: ENDODONTICS - LONGITUDINAL TOOTH FRACTURES**COURSE CODE: FJ04-OPR-41****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

41.1 Define and differentiate:

- a) Craze line
- b) Cusp fracture
- c) Cracked tooth
- d) Split tooth
- e) Vertical root fracture.

41.2 Describe the causes of these fractures of tooth structure.

41.3 Describe symptoms and clinical features of crack tooth.

41.4 Discuss the diagnosis, treatment, prognosis and prevention of a crack at various levels.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Longitudinal Tooth Fractures: Causes, clinical Diagnosis and Management	LEC	1	✓	✓
2	Cracked tooth: Features and Management	LEC		✓	✓
3	Prognosis of cracks at different levels	LEC		✓	✓
4	Cracks and Fractures	SGD	4	✓	✓
		Total	5		

**COURSE NAME: ENDODONTICS - ENDODONTIC AND PERIODONTAL INTER
RELATIONSHIP**

COURSE CODE: FJ04-OPR-42

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 42.1 Discuss possible paths of communication between pulpal and periodontal tissue.
- 42.2 Classify endodontic-periodontal lesions.
- 42.3 Discuss the differential diagnosis between lesions of endodontic or periodontal origin based on clinical, radiographic and histopathological features.
- 42.4 Discuss treatment options.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Classification of endodontic-periodontal lesions	LEC	1	✓	✓
2	Differential diagnosis based on clinical, radiographic and histopathological features	LEC		✓	✓
3	Paths of communication between pulpal and periodontal tissues	LEC		✓	✓
4	Treatment options of endodontic-periodontal lesions	LEC		✓	✓
5	Perio-endo Disease	SGD	3	✓	✓
		Total	4		

COURSE NAME: PAEDODONTICS- INTRODUCTION TOPEDIATRIC DENTISTRY

COURSE CODE: FJ04-OPR-43

COURSE OBJECTIVES:

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

- 43.1 Discuss growth and development of jaws and dentition.
- 43.2 Understand the differences between permanent and primary teeth.
- 43.3 Discuss the chronology of development of primary and permanent dentition.
- 43.4 Discuss eruption timing and sequence of primary and permanent teeth.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ
1	Growth and development of jaws and dentition	SGD	4	✓
2	Primary and permanent dentitions	SGD		✓
3	Chronology of both dentitions	SGD	4	✓
			3	✓
4	Eruption timing and sequence of primary teeth	SGD		✓
		Total	11	

COURSE NAME: PAEDODONTICS-PAIN AND ANXIETY MANAGEMENT IN PEDIATRIC PATIENTS**COURSE CODE: FJ04-OPR-44****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

44.1 Enlist various pharmacological and non-pharmacological methods of pain and anxiety control.

44.2 Discuss different behavioral management strategies for pediatric patients.

44.3 Describe different sedation techniques for pediatric patients.

44.4 Discuss the dental management of children with special needs

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Methods of pain and anxiety control	LEC	1	✓	✓
2	Behavioral management strategies	LEC		✓	✓
				✓	
3	Behavioral management	SGD	5	✓	✓
4	Conscious sedation	SGD		✓	✓
5	Dental management of children with special needs	SGD		✓	✓
		Total	6		

COURSE NAME: PREVENTION OF DENTAL DISEASE IN PEDIATRIC PATIENTS**COURSE CODE: FJ04-OPR-45****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 45.1 Discuss the importance of a detailed medical and dental history for management of the pediatric patient.
- 45.2 Describe various medical conditions that may affect the management of pediatric patient.
- 45.3 Discuss effects of diet on dental tissues and describe various sources of sugars.
- 45.4 Discuss the effect of fluoride on dental caries process.
- 45.5 Explain the rationale for fluoride supplementation.
- 45.6 Describe different vehicles of fluoride delivery.
- 45.7 Describe correct tooth brushing technique.
- 45.8 Explain the importance of parental counseling.
- 48.9 Describe the importance of dietary management and home care in caries prevention.
- 48.10 Discuss the importance of regular dental follow-ups.
- 48.11 Understand the importance of fissure sealing and acid etch technique as a preventive measure.
- 48.12 Describe the placement of pit and fissure sealants and preventive resin restorations in primary teeth.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Medical and dental history taking in children	LEC	1	✓	✓
2	Effects of sugary diet on dental caries	LEC		✓	✓
3	Parent counseling, proper toothbrushing and fluoride therapy	LEC		✓	✓
4	Counselling	SGD	4	✓	✓
5	Regular dental followups, dietary management and home care	LEC	1	✓	✓
6	Fissure sealants and preventive resin restorations			✓	✓
		Total	6		

COURSE NAME: PEADODONTICS-LOCAL ANESTHESIA TECHNIQUE FOR PEDIATRIC PATIENTS

COURSE CODE: FJ04-OPR-46

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 46.1 Describe available topical anesthesia solutions.
- 46.2 Describe new techniques for achieving topical anesthesia.
- 46.3 List various techniques of local anesthesia administration.
- 46.4 Describe pain free anesthesia technique.
- 46.5 Discuss possible complications of local anesthesia.
- 46.6 Discuss the dental management of children with special needs

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ
1	Local anesthesia technique for pediatric patients	LEC	1	✓
2	Pain free anesthesia techniques	LEC		✓
3	Complications of local anesthesia	LEC		✓
4	Local Anesthesia Techniques and Calculation	WS	4	✓
		Total	5	

COURSE NAME: PAEDODONTICS- RESTORATIVE DENTISTRY FOR PEDIATRIC PATIENTS**COURSE CODE: FJ04-OPR-47****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 47.1 Discuss methods to detect and diagnose dental caries in primary teeth.
- 47.2 Describe the pattern of early childhood caries and its management.
- 47.3 Discuss the radiographic views that are of value in diagnosing dental caries.
- 47.4 Explain the importance of isolation when restoring teeth.
- 47.5 Explain the importance of matricing in proximal decay.
- 47.6 Discuss restorative materials that can be used to restore a carious lesion.
- 47.7 Describe restoration of occlusal and proximal caries.
- 47.8 Describe the indications for stainless steel crowns and acrylic crowns.
- 47.9 Describe the technique for stainless steel crown and acrylic crown placement.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Detection and diagnosis of deciduous caries	LEC	1	✓	✓
2	ECC: causes and management	LEC		✓	✓
3	Isolation and matricing in proximal restorations	LEC		✓	✓
4	Restorative materials and methods for occlusal and proximal caries	LEC		✓	✓
5	Indications and procedure of SS crowns and strip crowns	LEC	1	✓	✓
6	Stainless steel crowns	SGD	3	✓	✓
		Total	5		

COURSE NAME: PAEDODONTICS -PULP THERAPY FOR PRIMARY AND YOUNG PERMANENT TEETH

COURSE CODE: FJ04-OPR-48

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 48.1 Understand the development of a tooth from its eruption to root maturation.
- 48.2 Explain the need to save a primary tooth.
- 48.3 Describe the importance of case assessment.
- 48.4 Describe the indications and contraindications of pulp therapy in deciduous teeth.
- 48.5 Describe the stabilization of mouth in case of rampant caries.
- 48.6 Describe the indications, contraindications and procedures in primary dentition for:
 - a) Pulp cap, pulpotomy and pulpectomy.
- 48.7 Describe indications, contraindications and procedure in young permanent dentition for:
 - a) Indirect pulp cap, direct pulp cap, cvek's pulpotomy, a\exogenesis and apexification.
- 48.8 Discuss the role of regenerative endodontics in the management of non-vital immature teeth.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Primary tooth development and root maturation	LEC	1	✓	✓
2	Case assessment in saving primary dentition	LEC		✓	✓
3	Stabilization of rampant caries	LEC	1	✓	✓
4	Pulp therapies : indications, contraindications in both primary and young permanent dentition	LEC	1	✓	✓
5	Regenerative endodontics	LEC		✓	✓
6	Pulpcap, pulpotomy and pulpectomy	SGD	6	✓	✓
		Total	9		

COURSE NAME: PAEDODONTICS -INHERITED ANOMALIES OF ENAMEL AND DENTIN

COURSE CODE: FJ04-OPR-49

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 49.1 Enlist various inherited enamel and dentin defects.
- 49.2 Recognize the clinical problems associated and treatment objectives with inherited enamel and dentin defects.

- 49.3 Discuss the etiology, prevention, clinical features and management of:
 a) Amelogenesis Imperfecta, Dentinogenesis Imperfecta and Molar Incisor Hypoplasia.
 49.4 Discuss the dental management of children with special needs

MODE OF INFORMATION TRANSFER (MIT)& ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Inherited defects of enamel and dentin	LEC	1 1 1 1	✓	✓
2	Amelogenesis imperfect: etiology, features and management	LEC		✓	✓
3	Dentinogenesis imperfect: etiology, features and management	LEC		✓	✓
4	Molar-Incisor-Hypoplasia: identification, etiology and treatment	LEC		✓	✓
5	Developmental Anomalies	SGD	4	✓	✓
		Total	6		

COURSE NAME: PAEDODONTICS -PERIODONTAL DISEASES IN PEDIATRIC PATIENTS
COURSE CODE: FJ04-OPR-50

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 50.1 Classify periodontal diseases in children.
- 50.2 Discuss the etiology, clinical features and management of acute gingival conditions:
- 50.3 Primary herpetic gingivostomatitis
- 50.4 Necrotizing ulcerative gingivitis.
- 50.5 Discuss the etiology, clinical features and management of chronic gingivitis and periodontitis.
- 50.6 Discuss etiology, clinical features and management of drug induced gingival enlargement.
- 50.7 Discuss periodontal disease as a manifestation of various syndromes and systemic diseases in children.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Periodontal diseases in children: classification, etiology & features	LEC	1 1 1	✓	✓
2	Gingival diseases: acute and chronic, prevention & treatment	LEC		✓	✓
3	Periodontal diseases as manifestation of many systemic and syndromic underlying conditions	LEC		✓	✓
		Total	2		

COURSE NAME: PAEDODONTICS -ANOMALIES OF TOOTH FORMATION AND ERUPTION

COURSE CODE: FJ04-OPR-51

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 51.1 Discuss the prevalence, etiology and management of variation in number of teeth.
- 51.2 Discuss various anomalies in tooth size and their management.
- 51.3 Discuss various anomalies of tooth form and their management.
- 51.4 Describe disturbances in eruption and exfoliation and its clinical significance.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Anomalies of number of teeth	LEC	1	✓	✓
2	Anomalies of tooth size	LEC		✓	✓
3	Anomalies of tooth form	LEC		✓	✓
4	Disturbances in eruption and exfoliation time and sequence	LEC		✓	✓
5	Anomalies of tooth formation	SGD	4	✓	✓
		Total	6		

COURSE NAME: PEADODONTICS - THE PAEDODONTIC-ORTHODONTIC INTERFACE

COURSE CODE: FJ04-OPR-52

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 52.1 Understand the importance of screening patients for orthodontic referral at the correct time.
- 52.2 Define interceptive orthodontics.
- 52.3 Discuss the rationale and sequence of serial extractions.
- 52.4 Enlist and discuss various space maintainers used in mixed dentition.
- 52.5 Enlist and describe various habit breaking appliances in pediatric patients.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Interceptive orthodontics	LEC	1	✓	✓
2	Serial extractions	LEC		✓	✓

3	Space maintainers	LEC		✓	✓
4	Habit breaking devices	LEC		✓	✓
5	Paedo-ortho interface	SGD	4	✓	✓
		Total	5		

COURSE NAME: PAEDODONTICS - BIOLOGY OF DENTAL PULP AND PERIRADICULAR TISSUE

COURSE CODE: FJ04-OPR-53

LEARNING OBJECTIVES:

By the end of the topic the students will be able to:

- 53.1 Classify dento-alveolar injuries.
- 53.2 Understand the importance of a detailed history of trauma including past medical and dental history.
- 53.3 Enlist the questions to be inquired from a patient presenting with history of dental trauma.
- 53.4 Perform a thorough extra-oral and intra-oral examination.
- 53.5 Discuss the appropriate radiographs needed for an accurate diagnosis.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Dento-alveolar injuries in children	LEC	1	✓	✓
2	History taking of traumatic injuries	LEC		✓	✓
3	Complete intra-oral and extra-oral examinations	LEC	1	✓	✓
4	Radiographic imaging and interpretation	LEC		✓	✓
		Total	2		

COURSE NAME: PAEDODONTICS- INJURY TO TOOTH AND HEALING AFTER TRAUMA

COURSE CODE: FJ04-OPR-54

COURSE OBJECTIVES:

By the end of the topic the students will be able to:

- 54.1 Describe different types of healings.
- 54.2 Describe the healing of pulp and factors affecting its healing.
- 54.3 Describe the healing of periodontium and factors affecting its healing
- 54.4 Describe and differentiate between various types of root resorptions:
- 54.5 External resorption, cervical resorption internal resorption and Replacement resorption.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topic	MIT	Hrs	BCQ	OSCE
1	Healing patterns after dental trauma	LEC	1	✓	✓
2	Healing of pulp and factors affecting it	LEC		✓	✓
3	Healing of periodontium and factors affecting it	LEC		✓	✓
4	Root resorption: types, etiology, features and treatment	SGD	4	✓	✓
				✓	
		Total	5		

COURSE NAME: PAEDODONTICS- INJURIES TO PRIMARY DENTITION**COURSE CODE: FJ04-OPR-55****LEARNING OBJECTIVES:**

By the end of the topic the students will be able to:

55.1 Describe management of hard tissue injury in the following categories:

- a) Uncomplicated crown fracture, Complicated crown fracture, Crown-root fracture and Root fracture.

55.2 Describe management of soft tissue injury in following categories:

- a) Concussion, Subluxation, Extrusive luxation, Lateral luxation, Intrusion and Avulsion.

55.3 Describe the sequel of injuries to the primary dentition.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topics	MIT	Hrs	BCQ	OSCE
1	Injuries to primary dentition	LEC	1	✓	✓
2	Management of hard and soft tissues injuries	LEC		✓	✓
3	Sequel of injuries to primary dentition	LEC		✓	✓
4	Trauma to primary dentition	SGD	4	✓	✓
		Total	5		

COURSE NAME: PAEDODONTICS- INJURY TO PERMANENT DENTITION-HARD TISSUE**COURSE CODE: FJ04-OPR-56****COURSE OBJECTIVES:**

By the end of the topic the students will be able to:

- 56.1 Describe management of hard tissue injury in the following categories:
- Enamel infarction, Enamel fracture, Enamel-dentin fracture, Complicated crown fracture, Uncomplicated
 - crown-root fracture, Complicated crown-root fracture and Root fracture.
- 56.2 Discuss the types and uses of splints.
- 56.3 Describe the duration of splint therapy in each injury.
- 56.4 Describe the procedure for placement of composite and wire splint.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S.R	Topics	MIT	Hrs	BCQ	OSCE
1	Management of hard tissue injuries to tooth crown and root	LEC	1	✓	✓
2	Splint therapy: types of splint, uses and duration in each case	LEC		✓	✓
3	Placement of composite and wire splint	LEC		✓	✓
4	Trauma in permanent teeth	SGD	8	✓	✓
		Total	9		

COURSE NAME: PAEDODONTICS- Injury to Permanent Dentition-Luxation and Avulsion

COURSE CODE: FJ04-OPR-57

Learning Objectives: By the end of the topic the students will be able to:

- 57.1 Describe management of soft tissue injury in following categories:
- Concussion
 - Subluxation
 - Extrusive luxation
 - Lateral luxation
 - Intrusion
 - Avulsion.
- 57.2 Describe duration of splint therapy in each injury.
- 57.3 Describe the rationale of delayed reimplantation of an avulsed tooth.

Mode of Information Transfer (MIT) & Assessment:

S.R		MIT	Hrs	BCQ	OSCE
1	Injuries soft tissues in permanent dentition: types and management	LEC	1	✓	✓
2	Duration of splint therapy in each type of luxation and avulsion	LEC		✓	✓
3	Reimplantation of avulsed teeth	LEC	1	✓	✓
4	Avulsion	SGD	6	✓	✓
		Total	8		

RECOMMENDED COURSE BOOKS:

OPERATIVE DENTISTRY

1. **Fundamentals of Operative Dentistry, James B.Summit, 5th Edition**
2. **Sturdevant's Art & Science of Operative Dentistry, 6th Editions**
3. **Pickard's Manual of Operative Dentistry, 9th Edition**
4. **Evan's Atlas of Operative Dentistry**

PAEDIATRIC DENTISTRY

1. **Paediatric Dentistry, Richard Welbury, 5th Edition**

ENDODONTICS

1. **Endodontics Principles & Practice, Mahmoud Torabinejad, 5th Edition**

FINAL YEAR BDS – ORAL SURGERY: FJ04-ORS

RATIONALE

Oral surgery is an important subject as it deals with intra and extra oral conditions arising in the facial region which include pathological, neurological and trauma conditions which are dealt under local and general anesthesia and can be treated with the help of oral surgery to restore facial function and harmony.

OUTCOMES

By the end of final year, the students should be able to;

1. Take history, establish a diagnosis and plan treatment
2. Administer Local anesthesia (Block & infiltrations)
3. Perform simple tooth extractions.
4. Describe radiographic landmarks & findings.
5. Discuss minor oral surgical procedures
6. Discuss maxilla-facial fractures.
7. Discuss pathological & neurological conditions associated with head and neck region.
8. Describe the basic concepts of implantology.

LEGEND:

- **LEC** – Lecture (Large Class Format)
- **SGD** – Small Group Discussion
- **WSP** – Workshop (Hands-on)
- **SCT**– Simulated Clinical Training
- **JC** – Journal Club

COURSES:

- Minor Oral Surgery (MOS)
- Management of Oral Diseases (MOD)
- Maxillofacial Surgery (MFS)

COURSE: MINOR ORAL SURGERY

S.NO	COURSE	MODULE	LE C	SGD	WSP	SCT	JC	#
1.	MINOR ORAL SURGERY	BASIC PRINCIPLES OF ORAL SURGERY	3	3	1	1	1	9
2.		MEDICAL ASPECTS OF ORAL SURGERY	2	2	1	1	0	6
3.		ANESTHESIA AND SEDATION	2	2	0	1	0	5
4.		BASIC PRINCIPLES OF EXODONTIA	3	2	0	1	0	6
5.		PRINCIPLES OF USE OF INSTRUMENTS	0	2	1	1	0	4
6.		NON-SURGICAL EXTRACTIONS	1	2	0	2	0	5
7.		SURGICAL EXTRACTIONS	1	1	0	3	1	6
8.		IMPACTED TEETH	4	4	0	0	2	10
9.		INFECTIONS AND SPREAD OF INFECTION	8	3	0	0	0	11
TOTAL			24	21	3	10	4	62

COURSE: MANAGEMENT OF ORAL DISEASES

S.NO	COURSE	MODULE	LEC	SGD	WSP	SCT	JC	#
1.	MANAGEMENT OF ORAL DISEASES	JAW CYSTS	2	3	0	0	2	7
2.		JAW TUMORS	2	2	0	0	0	4
3.		SOFT TISSUE TUMORS AND ORAL MALIGNANCY	3	1	0	0	0	4
4.		JAW RESECTION	3	2	0	0	0	5
5.		PRINCIPLES OF DIAGNOSIS & BIOPSY	2	1	1	0	0	4
6.		DENTAL MANAGEMENT OF RADIOTHERAPY & CHEMOTHERAPY PATIENTS	2	0	0	0	2	4
7.		RECONSTRUCTION PRINCIPLES	2	2	0	0	0	4
8.		SALIVARY GLAND DISEASE	3	1	0	1	0	5
9.		TMJ DISORDERS	3	0	0	1	0	4
10.		SOFT & HARD TISSUE ABNORMALITIES	4	4	0	0	2	10
11.		DENTAL IMPLANTS	3	2	0	0	1	5
12.		FACIALPAIN	4	3	0	1	0	8
TOTAL			33	21	1	3	7	65

COURSE: MAXILLOFACIAL SURGERY

S.NO	COURSE	MODULE	LEC	SGD	WSP	SCT	JC	#
1.	MAXILLOFACIAL SURGERY	EMERGENCY MANAGEMENT OF TRAUMA PATIENT	2	1	0	3	0	6
2.		TRAUMATIC INJURIES OF TEETH AND SOFT TISSUE INJURIES.	1	3	0	0	0	4
3.		MANAGEMENT OF MANDIBULAR FRACTURES	3	1	1	0	1	6
4.		ZYGOMATIC COMPLEX FRACTURES	2	1	0	1	0	4
5.		NASAL & ORBITAL FRACTURES	1	3	0	0	0	4
6.		MID FACIAL FRACTURES	3	2	1	0	1	7
7.		CLEFT LIP AND PALATE	2	1	0	0	0	3
8.		ORTHO-GNATHIC SURGERY	1	1	0	0	1	3
9.		PERIAPICAL SURGERY	1	1	0	1	0	3
TOTAL			16	14	2	2	3	37

COURSE: MINOR ORAL SURGERY [FJ04-ORS-1]
MODULE: BASIC PRINCIPLES OF ORAL SURGERY
CODE: FJ04-ORS-1.1

OBJECTIVES:

1. Introduction to History, Diagnosis and Treatment Planning
2. Discuss principles and techniques of sterilization
3. Describe various methods of incisions and flap designs
4. Discuss methods of hemostasis and suturing techniques
5. Post-operative care, nutrition and prevention of infections
6. Concepts of wound healing and repair
7. Explain Basic necessities for surgery

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	History,Diagnosis and treatment planning	LEC	1		
2.	Principles and techniques of sterilization	SGD	1		
3.	Methods of incisions and flap designs	LEC	1		
4.	Methods of hemostasis and suturing techniques	WSP	1		
5.	Examination of Oral Cavity	SCT	1		
6.	Suturing material, technique and types	SGD	1		
7.	Muco-periosteal flaps – classification and design	SGD	1		
8.	Stages of wound healing, dead space management and healing of extraction socket	LEC	1		
9.	Surgical significance of wound healing	JC	1		
	Total		09		

COURSE: MINOR ORAL SURGERY [FJ04-ORS-1]
MODULE: MEDICAL ASPECTS OF ORAL SURGERY
CODE: FJ04-ORS-1.2

OBJECTIVES:

1. Discuss Management of Medically compromised patient
2. Discuss Medication for pregnant & postpartum patients
3. Discuss situations which can exaggerate the pre-existing Medical condition
4. Discuss preventive measures before treatment

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Management of Patient with Compromising Medical Condition.	LEC	1		
2.	Medication for pregnant & postpartum patients after treatment	SGD	1		
3.	Drug dosage, indication and contraindication	SGD	1		
4.	Medical emergency	LEC	1		
5.	Cardio pulmonary resuscitation	SCT	1		
6.	Emergency in Oral Surgery Practice	WSP	1		
	Total		06		

COURSE: MINOR ORAL SURGERY [FJ04-ORS-1]
MODULE:ANESTHESIA & SEDATION
CODE: FJ04-ORS-1.3

OBJECTIVES

1. Types (local, general & sedative anesthesia). Classify Anesthesia
2. Describe different type of Anesthetic solution in dentistry
3. Preoperative assessment (for local & General anesthesia)
4. Interpret investigation for GA fitness
5. Describe Mechanism of LA
6. Indication and contraindication of (LA & GA)
7. Discuss indication &contraindication of Anesthesia

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Anesthesia Types,Indication and contraindication (local, general & sedative anesthesia)	LEC	1		
2.	Different type of Anesthetic solution and technique used in dentistry	LEC	1		
3.	Techniques &chair position	SCT	1		
4.	GA preoperative assessment of Patient	SGD	1		
5.	LA indication and contraindication on medically compromised patient	SGD	1		
	Total		05		

COURSE: MINOR ORAL SURGERY [FJ04-ORS-1]
MODULE: BASIC PRINCIPLES OF EXODONTIA
CODE: FJ04-ORS-1.4

OBJECTIVES:

1. Discuss pain & Anxiety control
2. Discuss Pre-surgical Medical Assessment
3. Discuss Clinical evaluation of teeth for removal
4. Discuss Radiographic examination of tooth for removal
5. Describe patient & surgeon preparation

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Pain and Anxiety Control	LEC	1		
2.	Basic principles of Exodontia	LEC	1		
3.	Pre-surgical Medical Assessment (Clinical evaluation & radiographic examination of teeth for removal)	LEC	1		
4.	Clinical evaluation of teeth for removal	SCT	1		
5.	Radiographic examination of tooth for removal	SGD	1		
6.	Patient & surgeons preparation	SGD	1		
	Total		06		

COURSE: MINOR ORAL SURGERY [FJ04-ORS-1]
MODULE: PRINCIPLES OF USE OF INSTRUMENTS
CODE: FJ04-ORS-1.5

OBJECTIVES:

1. Describe instruments for incising tissue, elevating muco-periosteum, retracting soft tissue
2. Describe instruments for controlling hemorrhage, grasping tissue
3. Describe instruments for removing bone, removing soft tissue from bony defects, suturing mucosa
4. Describe instruments for holding mouth open, providing suction
5. Describe instruments for transferring sterile instruments, holding towel & drapes in position, irrigation
6. Describe Dental elevators, extraction forceps
7. Discuss instrument tray system

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Principles of use of instruments	WSP	1		
2.	Armamentarium of instrument of basic oral surgery	SGD	1		
3.	Instrument handling	SGD	1		
4.	Hands on basic oral surgical instrument on models / patient	SCT	1		
	Total		04		

COURSE:MINOR ORAL SURGERY [FJ04-ORS-1]
MODULE: NON SURGICAL EXTRACTIONS
CODE: FJ04-ORS-1.6

OBJECTIVES:

1. List the Indications for removal of teeth
2. List Contraindications for the removal of teeth
3. Explain Chair position for Forceps extraction
4. Explain mechanical principles involved in tooth extractions
5. Describe procedure for closed extraction
6. Discuss specific techniques for removal of each tooth
7. Describe post extraction care of tooth socket

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Assessment of tooth for extraction (Indication and contra-indication for removal of tooth)	LEC	1		
2	Chair position for Forceps extraction	SCT	1		
3	mechanical principles involved in tooth extractions	SGD	1		
4	specific techniques for removal of each tooth	SCT	1		
5	post extraction care of tooth socket	SGD	1		
	Total		06		

COURSE: MINOR ORAL SURGERY [FJ04-ORS-1]
MODULE: SURGICAL EXTRACTIONS
CODE: FJ04-ORS-1.7

OBJECTIVES:

1. Indications for surgical extraction
2. Technique for open extraction of single- rooted tooth
3. Technique for surgical removal of multi-rooted teeth
4. Removal of small root fragments and root tips
5. Policy for leaving root fragments.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Assessment of surgical extraction	LEC	1		
2.	Technique for open extraction of single- rooted tooth	SCT	1		
3.	Technique for surgical removal of multi-rooted teeth	SCT	1		
4.	specific techniques for removal of each tooth	SCT	1		
5.	post extraction care of tooth socket	SGD	1		
6.	post extraction care of tooth socket	JC	1		
	Total		06		

COURSE: MINOR ORAL SURGERY [FJ04-ORS-1]

MODULE: IMPACTED TEETH

CODE: FJ04-ORS-1.8

OBJECTIVES:

1. Define Impaction
2. List indications & contraindications for removal of impacted teeth
3. Explain the Classification system of impacted teeth
4. Discuss the difficulty of removal of other impacted teeth
5. Describe surgical procedures
6. Discuss preoperative patient management
7. Describe control of postoperative bleeding
8. Explain soft tissue injuries
9. Discuss complications with the tooth being extracted
10. Describe oro-antral communications
11. Describe delayed healing and infection

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Indications & contra-indications for removal of impacted teeth	LEC	1		
2.	Classification system of mandibular impacted teeth	LEC	1		
3.	Radiographs for third molar impactions	LEC	1		
4.	Modifications of Classification system	LEC	1		
5.	Difficulty of removal of other impacted teeth	SGD	1		
6.	Control of postoperative bleeding	SGD	1		
7.	Control of postoperative pain and discomfort	SGD	1		
8.	Oro-antral communications	SGD	1		
9.	Delayed healing and infection	JC	1		
10.	Post extraction care of surgical extracted tooth socket	JC	1		
	Total		10		

COURSE: MINOR ORAL SURGERY [FJ04-ORS-1]
MODULE: INFECTIONS & SPREAD OF INFECTION
CODE: FJ04-ORS-1.9

OBJECTIVES:

1. Explain microbiology of odontogenic infections
2. Classify spaces of infection
3. Explain Fascial space infections
4. Discuss principles of management of infection
5. Discuss natural history of progression of odontogenic infections
6. Explain principles of prevention of infection
7. Explain principles of prophylaxis of wound infection
8. Explain principles of prophylaxis against metastatic infection
9. Explain osteomyelitis
10. Explain actinomycosis
11. Explain candidiasis

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Classification of fascial space	LEC	1		
2.	Boundaries and landmark of fascial space	LEC	1		
3.	Routes of spread of fascial infection	LEC	1		
4.	Principles of management of infection	LEC	1		
5.	Assessment of fascial space infection	LEC	1		
6.	Management of fascial space infection	LEC	1		
7.	Post operative care of fascial space infection	LEC	1		
8.	Explain osteomyelitis, actinomycosis, candidosis	LEC	1		
9.	Assessment of fascial space infection	SGD	1		
10.	Management of fascial space infection	SGD	1		
11.	Post operative care of fascial space infection	SGD	1		
	Total		11		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]

MODULE: JAW CYSTS

CODE: FJ04-ORS-2.1

OBJECTIVES

1. Discuss Basic surgical goals
2. Describe surgical management of cysts and cyst like lesions of the jaws

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Classification of cyst	LEC	1		
2.	Diagnosis and management of cyst	LEC	1		
3.	Eradication of pathological condition	SGD	1		
4.	Enucleation and marsupialization	SGD	1		
5.	Enucleation, marsupialization, enucleation after marsupialization, enucleation with curettage	SGD	1		
6.	Odontogenic cyst	JC	1		
7.	Non odontogenic cyst	JC	1		
	Total		07		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]

MODULE: JAW TUMOUR

CODE: FJ04-ORS-2.2

OBJECTIVES:

1. Identify Odontogenic tumors
2. Identify Non-odontogenic tumors
3. Discuss Principles of surgical management of jaw tumors

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Classification of odontogenic and non-odontogenic tumors	LEC	1		
2.	Diagnosis and management of jaw tumor	LEC	1		
3.	Diagnosis and management of jaw tumor	SGD	1		
4.	Post-operative follow up	SGD	1		
	Total		04		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]
MODULE: SOFT TISSUE TUMORS AND ORAL MALIGNANCY
CODE: FJ04-ORS-2.3

OBJECTIVES:

4. Discuss management of soft tissue tumors
5. Describe Management of oral precancerous lesions and conditions
6. Discuss Principles of management of oral malignancies

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Classification of oral premalignant lesions and conditions	LEC	1		
2.	Diagnostic triage and staging of oral malignancies	LEC	1		
3.	Diagnosis and management of benign soft tissue tumors	LEC	1		
4.	Post-operative follow up	SGD	1		
	Total		04		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]**MODULE: JAW RESECTION****CODE: FJ04-ORS-2.4****OBJECTIVES:**

1. Name type of resections & their indications in the jaw tumor
2. Explain Reconstruction of jaws after removal of oral tumors

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Marginal and partial resection	LEC	1		
2.	Indication of resections according to pathology and Ridge augmentation includes bone grafts, synthetic bone grafts or combination	LEC	1		
3.	Type of resections & their indications in the jaw tumor & Reconstruction of jaws after removal of oral tumors	LEC	1		
4.	Bone grafts, autogenous and alloplastic bone grafts	SGD	1		
5.	Type of resections & their indications in the jaw tumor & Reconstruction of jaws after removal of oral tumors	SGD	1		
	Total		05		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]
MODULE:PRINCIPLES OF DIAGNOSIS & BIOPSY
COURSE CODE: FJ04-ORS-2.5

OBJECTIVES:

1. Discuss examination and diagnostic methods
2. Discuss Principles of biopsy
3. Describe soft tissue biopsy technique and surgical principles
4. Describe intraosseous or hard tissue biopsy technique and surgical principles
5. Discuss referral for biopsies

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Biopsies its techniques and principles	LEC	1		
2.	Differential Diagnosis - history,clinical examination,radiographs,lab investigations	LEC	1		
3.	Incisional, excisional,aspiration	SGD	1		
4.	Radiographic Interpretations	WSP	1		
	Total		04		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]
MODULE: DENTAL MANAGEMENT OF RADIOTHERAPY & CHEMOTHERAPY PATIENTS
CODE: FJ04-ORS-2.6

OBJECTIVES:

1. Describe dental management of patients undergoing radiotherapy to head and neck.
2. Describe dental management of patients on systemic chemotherapy for malignant disease.

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Dental management of patients undergoing radiotherapy to head and neck	LEC	1		
2.	Dental management of patients on systemic chemotherapy for malignant disease.	LEC	1		
3.	Dental management of patients undergoing radiotherapy to head and neck	JC	1		
4.	Dental management of patients on systemic chemotherapy for malignant disease.	JC	1		
	Total		04		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]
MODULE: RECONSTRUCTION PRINCIPLES
CODE: FJ04-ORS-2.7

OBJECTIVES:

1. Classify the Mucosal Flaps use for reconstruction
2. Describe basic reconstructive principles

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Classifications of mucosal flaps	LEC	1		
2.	Reconstructive principles	LEC	1		
3.	Reconstructive principles	SGD	1		
4.	Hands on workshop on Goat head.	SCT	1		
	Total		04		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]
MODULE: SALIVARY GLAND DISEASE
CODE: FJ04-ORS-2.8

OBJECTIVES:

1. Discuss Embryology, Anatomy and Physiology
2. Discuss Diagnostic Modalities
3. Describe obstructive salivary gland disease
4. Discuss Mucous retention and extravasation phenomenon
5. Describe salivary gland infections, Necrotizing sialometaplasia
6. Describe sjogren's syndrome
7. Discuss traumatic salivary gland injuries
8. Describe salivary gland tumors

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Clinical features, investigation of salivary gland disorders.	LEC	2		
2.	Management of salivary gland tumors	LEC	1		
3.	Sjogren's syndrome	SGD	1		
4.	Salivary gland infections, Necrotizing sialometaplasia	SCT	1		
	Total		04		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]
MODULE:TMJ DISORDERS.
CODE: FJ04-ORS-2.9

OBJECTIVES:

1. Discuss Evaluation
2. List classification of temporomandibular disorders
3. Identify sign & symptoms and prescribe relevant investigation
4. Discuss different treatment options
5. Explain permanent occlusion modification
6. Explain temporomandibular joint surgery
7. Advised follow up

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Assessment of TMJ, muscles of mastication, investigations and radiographs	LEC	1		
2.	Management of TMJ Disorders	LEC	1		
3.	Management of myofacial pain and TMPDS	LEC	1		
4.	Muscles of mastication examination	SCT	1		
	Total		04		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]
MODULE:SOFT & HARD TISSUE ABNORMALITIES
CODE: FJ04-ORS-2.10

OBJECTIVES:

1. Explain objectives of pre-prosthetic surgery
2. Discuss principles of patient evaluation and treatment planning
3. Describe re-contouring the alveolar ridges
4. Describe tori removal
5. Describe soft tissue abnormalities
6. Define immediate dentures
7. Describe over denture surgery
8. Explain mandibular augmentation
9. Explain maxillary augmentation
10. Describe soft tissue surgery for ridge extension of the mandible
11. Describe soft tissue surgery for maxillary ridge extension
12. Explain correction of abnormal ridge relationships

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Principles of patient evaluation and treatment planning	LEC	1		
2.	Pre-prosthetic surgery	LEC	1		
3.	Correction of abnormal ridge relationships	LEC	1		
4.	Soft tissue abnormalities	LEC	1		
5.	Re-contouring the alveolar ridges	SGD	1		
6.	Tori removal	SGD	1		
7.	Maxillary augmentation	SGD	1		
8.	Mandibular augmentation	SGD	1		
9.	Immediate dentures	JC	1		
10.	Over denture surgery	JC	1		
	Total		10		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]
COURSE NAME: DENTAL IMPLANTS
CODE: FJ04-ORS-2.11

OBJECTIVES:

1. Discuss Biologic considerations for osseo-integration
2. List clinical implant components
3. Discuss implant prosthetic options
4. Discuss preoperative medical evaluation of implant patient
5. Describe surgical phase: treatment planning
6. Explain basic surgical techniques
7. Discuss complications
8. Describe advanced surgical techniques
9. Discuss special situations

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Dental Implants	LEC	1		
2.	Preoperative medical evaluation of implant patient	LEC	1		
3.	Basic surgical techniques	LEC	1		
4.	Implant prosthetic options	SGD	1		
5.	Complications	SGD	1		
6.	Dental implant osseo-integration	JC	1		
	Total		06		

COURSE: MANAGEMENT OF ORAL DISEASES [FJ04-ORS-2]**MODULE: FACIAL PAIN****CODE: FJ04-ORS-2.12****OBJECTIVES:**

1. Discuss Basics of pain neurophysiology
2. List classification of orofacial pains
3. Discuss neuropathic facial pains
4. Describe Chronic headache
5. Discuss other Chronic head pains of dental interest
6. Discuss Evaluation of the orofacial pain patients

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Classification of orofacial pain	LEC	1		
2.	Pain neurophysiology	SGD	1		
3.	Neuropathic facial pain	LEC	1		
4.	Facial and trigeminal nerve anatomy and pathophysiology	LEC	1		
5.	Management of facial pain	LEC	1		
6.	Chronic headache of dental interest	SGD	1		
7.	Neuropathic facial pain	SGD	1		
8.	Orofacial pain	SCT	1		
	Total		08		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]

MODULE: EMERGENCY MANAGEMENT OF TRAUMA PATIENT

CODE: FJ04-ORS-3.1

OBJECTIVES:

1. Discuss evaluation of patients with facial trauma
2. Describe & Demonstrate BLS &ATLS
3. Knows ABCDE

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Emergency management	LEC	1		
2.	Trauma life support	LEC	1		
3.	Emergency kit and crash cart	SCT	1		
4.	Basic life support	SGD	1		
5.	Demonstrate BLS &ATLS	SCT	1		
	Total		05		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]

MODULE: TRAUMATIC INJURIES OF TEETH AND SOFT TISSUE INJURIES.

CODE: FJ04-ORS-3.2

OBJECTIVES:

1. Describe soft tissue injuries
2. Describe dento-alveolar injuries

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Traumatic injuries of teeth and Management of soft tissue injuries.	LEC	1		
2	Evaluation & management of soft tissue injuries	SGD	1		
3	Evaluation & management of dento-alveolar injuries	SGD	1		
4	Soft tissue and dento-alveolar injuries	SGD	1		
	Total		04		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]
MODULE: MANAGEMENT OF MANDIBULAR FRACTURES
CODE: FJ-04-ORS-3.3

OBJECTIVES:

1. Discuss etiology, classification, clinical features & management of mandibular fractures
2. Identify complications of mandibular fractures

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Mandibular applied anatomy	LEC	1		
2.	Classification of mandibular fractures, clinical evaluation, radiographs	LEC	1		
3.	Management & complications	LEC	1		
4.	Classification of mandibular fractures, clinical evaluation, radiographs	SGD	1		
5.	Management& complications	WSP	1		
6.	Classification of mandibular fractures	JC	1		
	Total		06		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]
MODULE: ZYGOMATIC COMPLEX FRACTURES
CODE: FJ-04-ORS-3.4

OBJECTIVES:

1. Discuss causes, classification, clinical features & management of ZMC fractures
2. Prescribe appropriate radiographs

3. Identify complication of ZMC fractures

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Zygomatic complex applied anatomy	LEC	1		
2.	Classification, clinical features & management of ZMC fractures	LEC	1		
3.	Radiographic interpretations	SCT	1		
4.	Complication of ZMC fractures	SGD	1		
	Total		04		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]
MODULE: NASAL & ORBITAL FRACTURES
CODE: FJ-04-ORS-3.5

OBJECTIVES:

1. Describe anatomy of orbit
2. Discuss causes, classification, clinical features & management of orbital & nasal fractures
3. Identify complication of orbital & nasal fractures

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Nasal & Orbital anatomy	SGD	1		
2.	Classification of Nasal & Orbital fractures	SGD	1		
3.	Management of Nasal & Orbital fractures	LEC	1		
4.	Complications of Nasal & Orbital fractures	SGD	1		
	Total		04		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]

MODULE: MID FACIAL FRACTURE

CODE: FJ-04-ORS-3.6

OBJECTIVES:

1. Discuss causes, classification, sign & symptoms & Management of midface fractures
2. Identify complication of midface fracture

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Mid facial applied anatomy	LEC	1		
2.	Classification, sign & symptoms of mid-face fractures	LEC	1		
3.	Management of mid-face fractures	LEC	1		
4.	Complications of mid-face fractures	SGD	1		
5.	Classification, sign & symptoms of mid-face fractures	SGD	1		
6.	Management of mid-face fractures	WSP	1		
7.	Management of midface fractures	JC	1		
	Total		07		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]
MODULE: CLEFT LIP AND PALATE
CODE: FJ04-ORS-3.7

OBJECTIVES:

1. Describe embryology of mid face
2. Discuss causative factors
3. Discuss problems of the cleft afflicted individuals
4. Explain treatment of cleft lip and palate
5. Describe dental needs of cleft afflicted individuals

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Clinically oriented embryology of mid face	LEC	1		
2.	Classification of cleftlip and palate	SGD	1		
3.	Management of cleft lip and palate patients	LEC	1		
	Total		03		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]
MODULE: ORTHOGNATHIC SURGERY
CODE: FJ04-ORS-3.8

OBJECTIVES:

1. Classify orthognathic surgical procedures
2. Evaluate patient for orthognathic surgery
3. Name the procedure to correct jaw abnormalities

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Skeletal classification of malocclusion	SGD	1		
2.	Clinical examination and investigations	JC	1		
3.	Skeletal discrepancies and orthognathic surgery	LEC	1		
	Total		03		

COURSE: MAXILLOFACIAL SURGERY [FJ04-ORS-3]
MODULE: PERIAPICAL SURGERY
CODE: FJ04-ORS-3.9

OBJECTIVES:

1. Describe drainage of an abscess
2. Define Periapical surgery
3. Define Corrective surgery
4. Describe Healing
5. Discuss recall, adjuncts and when to consider referral

MODE OF INFORMATION TRANSFER (MIT) & ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1.	Surgical endodontics	LEC	1		
2.	Indications and technique (surgical endodontics)	SGD	1		
3.	Clinical features of periapical abscess	SCT	1		
	Total		03		

Course Code	MODULE	Total
FJ04-ORS-1.1	BASIC PRINCIPLES OF ORAL SURGERY	9
FJ04-ORS-1.2	MEDICAL ASPECTS OF ORAL SURGERY	6
FJ04-ORS-1.3	ANESTHESIA AND SEDATION	5
FJ04-ORS-1.4	BASIC PRINCIPLES OF EXODONTIA	6
FJ04-ORS-1.5	PRINCIPLES OF USE OF INSTRUMENTS	4
FJ04-ORS-1.6	NON-SURGICAL EXTRACTIONS	5
FJ04-ORS-1.7	SURGICAL EXTRACTIONS	6
FJ04-ORS-1.8	IMPACTED TEETH	10
FJ04-ORS-1.9	INFECTIONS AND SPREAD OF INFECTION	11
FJ-04-ORS-2.1	JAW CYSTS	7
FJ04-ORS-2.2	JAW TUMORS	4
FJ04-ORS-2.3	SOFT TISSUE TUMORS AND ORAL MALIGNANCY	4
FJ04-ORS-2.4	JAW RESECTION	5
FJ04-ORS-2.5	PRINCIPLES OF DIAGNOSIS & BIOPSY	4
FJ04-ORS-2.5	DENTAL MANAGEMENT OF RADIOTHERAPY & CHEMOTHERAPY PATIENTS	4
FJ04-ORS-2.6	RECONSTRUCTION PRINCIPLES	4
FJ04-ORS-2.7	SALIVARY GLAND DISEASE	5
FJ04-ORS-2.8	TMJ DISORDERS	4
FJ04-ORS-2.9	SOFT & HARD TISSUE ABNORMALITIES	10
FJ04-ORS-2.10	DENTAL IMPLANTS	5
FJ04-ORS-2.11	FACIALPAIN	
FJ04-ORS-3.1	EMERGENCY MANAGEMENT OF TRAUMA PATIENT	6
FJ04-ORS-3.2	TRAUMATIC INJURIES OF TEETH AND SOFT TISSUE INJURIES.	4
FJ04-ORS-3.3	MANAGEMENT OF MANDIBULAR FRACTURES	6
FJ04-ORS-3.4	ZYGOMATIC COMPLEX FRACTURES	4
FJ04-ORS-3.5	NASAL & ORBITAL FRACTURES	4
FJ04-ORS-3.6	MID FACIAL FRACTURES	7
FJ04-ORS-3.7	CLEFT LIP AND PALATE	3
FJ04-ORS-3.8	ORTHO-GNATHIC SURGERY	3
FJ04-ORS-3.9	PERIAPICAL SURGERY	3

	Content Taught in lectures/ SGD, WSP, SCT, JC in Clinical Rotations	164 hours
	Clinical Quota on Patients Observed/ Assisted/ Under Supervision Oral Surgery Procedures	90-100 Hours