



FATIMA JINNAH DENTAL COLLEGE HOSPITAL

STUDY GUIDE

Third Prof BDS 2026

NAME: _____

BATCH: _____ **ROLL NO:** _____

FATIMA JINNAH DENTAL COLLEGE



Vision

Fatima Jinnah Dental College aspires to advance oral health locally and globally by cultivating compassionate, scholarly, and competent dental professionals who serve communities with purpose, uphold clinical excellence, embrace inclusivity, and improve access to care.

Mission

To educate and empower socially responsible, compassionate, and ethical dental professionals through a globally aligned and inclusive curriculum that emphasizes clinical excellence, scholarly advancement, leadership development, and purposeful community engagement.

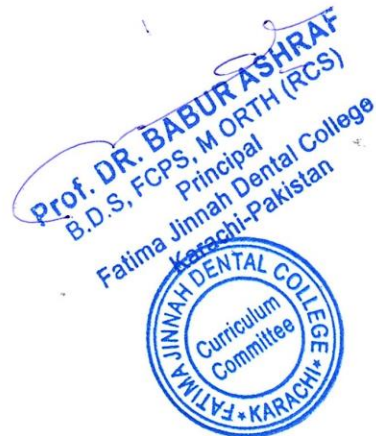
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BDS Program Outcomes

Upon successful completion of the 4-year BDS program, the FJDC graduates will be able to:

1. **PO 1 – Clinical Excellence**
Demonstrate clinical excellence by accurately diagnosing and managing dental conditions through the integration of basic and clinical sciences, evidence-based practices, and appropriate use of technology.
2. **PO 2 – Scholarship**
Engage in scholarly inquiry by applying research methodologies to generate evidence, critically appraise literature, and contribute to the advancement of dental knowledge and clinical practice.
3. **PO 3 – Leadership, Communication, and Collaboration**
Exhibit ethical leadership, effective communication, and collaborative decision-making to enhance team-based dental care and contribute positively to professional practice.
4. **PO 4 – Community Advocacy**
Advocate for oral health promotion and disease prevention to enhance individual and community well-being.
5. **PO 5 – Professionalism, Ethics, and Cultural Sensitivity**
Demonstrate ethical practice, accountability, cultural competence, and a commitment to patient-centered care, professional development, and personal integrity.
6. **PO 6 – Technological Adaptability and Lifelong Learning**
Adapt to evolving dental technologies and innovations by embracing a mindset of lifelong learning, digital fluency, and reflective practice to continuously enhance clinical effectiveness and professional growth.



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. General Surgery
2. General Medicine
3. Periodontology
4. Oral Medicine
5. Oral Pathology

The Non Examinable subjects

1. Operative Dentistry
2. Prosthodontics
3. Oral &Maxillofacial Surgery

Non Examinable subjects have weightage in the 4th Professional Year Exams.

Course No: Each course has a title and a number.

Learning Methods:

- Lectures
- Small group discussions (SGD)
- Bedside training (BSD)
- Chair side Training (CST)
- Learning with typodonts
- Learning with Histological Slides

Assessments

End of rotation 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.

Midterms will be conducted in the middle of academic 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 75% 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. He/ She 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 was 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 or 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.

GENERAL SURGERY STUDY GUIDE THIRD YEAR BDS

Introduction and Rationale:

This course deals mainly with the Principles of General Surgery. The aim is to provide information to students the pathophysiology of common and emergency General Surgical conditions and their management. The emphasis is the relevance to the prescribed BDS curriculum and its application in 'real- life' settings of a learner after he/she completes of a BDS program

Course duration: One year

Venue:

1. Department of General Surgery, Fatima Jinnah Dental College, Azam Town Karachi.
2. Chiniot General Hospital, Korangi Karachi.

Learning outcomes:

By the end of the General Surgery course and rotation in 3rd year BDS program, students will be able to:

1. Reflect, through good attitudes, responsible and serious concern to the patient's problems and his/her family, taking into account the moral and cultural characteristics of the society.
2. Use the required communication skills for taking appropriate history and conducting medical examination
3. Use the skills to reach a diagnosis or suggest a differential diagnosis of the problem presented.
4. Correlate underlying pathophysiology of the conditions with the manifestations of diseases.
5. Explain to the patient, honestly and in simple terms the surgical concepts of disease and surgical interventions, and show concern for their economic and social abilities in management choices.
6. Comply with the hospital system regarding uniform attendance, team work and ethical and responsible behavior.
7. Justify diagnosis and management of common General Surgical conditions in emergency and non-emergency situations
8. Demonstrate professional behavior throughout the rotation in wards, lectures and clinical skills learning.

Mode of Information Transfer (MIT):

- Whole class: Lectures
- Individual rotation groups:
 - Bedside teaching,
 - Small group discussions,
 - Task/ Team based learning (TBL),
 - Case based learning (CBL),
 - Flipped classroom (FC),
 - Workshops.

SUGGESTED BOOKS:

For Theory and OSCE:

- Short practice of surgery by Bailey & Love.
- Introduction to the symptoms & signs of surgical diseases by Norman browse.
- OSCE FROM CLINICAL CLASSES.

1. COURSE: PHYSIOLOGICAL RESPONSE TO SURGICAL TRAUMA AND HOMEOSTASIS.**CODE: FJ03-GS/1****LEARNING OBJECTIVES:**

At the end of this course , the third year BDS student will be able to:

- 1.1 Discuss the classical concepts of Homeostasis and physiological and biochemical changes in surgical injury.
- 1.2 List the sequential steps of physiological changes in the body occurring in response to surgical trauma.
- 1.3 List the mediators of metabolic response to Injury.
- 1.4 Enumerate the avoidable factors that compound the metabolic response to injury
- 1.5 Describe the optimal care required to avoid the complications.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Classical concepts of Homeostasis and Physiological and biochemical changes in surgical injury.	Lecture	1	✓	
2	Sequential steps of physiological changes in the body occurring in response to surgical injury				
3	Avoidable factors that compound the metabolic response to injury	Lecture	1	✓	
4	Mediators of metabolic response to Injury.				
5	Optimal care required to avoid the complications				
	Total		2		

2. COURSE: FLUID AND ELECTROLYTES BALANCE:**CODE: FJ03-GS/2****LEARNING OBJECTIVES:**

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

- 2.1 Describe the composition of body fluids and fluid regulation mechanisms.
- 2.2 Demonstrate how to calculate the fluid and electrolytes requirements in surgical patients.
- 2.3 Discuss how to assess the fluid and electrolytes imbalances, and how to manage them.
- 2.4 Justify the use of different types of intravenous fluid, their composition and indications of their use.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Composition of body fluids and fluid regulation mechanisms, Fluid and electrolytes requirements in surgical patients	Lecture	1	✓	
2	Different conditions of fluid and electrolytes imbalances.	Lecture	1	✓	
3	Types of intravenous fluid, their composition and indications.	Lecture	1	✓	
4	Practical use of different Intra-venous fluids.	Lecture	1		✓
	Total		4		

3. COURSE: NUTRITIONAL THERAPY TO SURGICAL PATIENTS.

CODE: FJ03-GS/3

LEARNING OBJECTIVES:

At the end of this course, the third year BDS student will be able to:

- 3.1 Enumerate the causes and consequences of malnutrition in the surgical patient
- 3.2 Justify the indications of nutritional therapy (enteral and parenteral).
- 3.3 Discuss the different methods of providing nutritional support
- 3.4 Describe the assessment of nutritional deficiencies in a patient.
- 3.5 Demonstrate the calculation of calories requirement in a surgical patients.
- 3.6 Enumerate different feeding solutions, and how to monitor the patient nutritional therapy.
- 3.7 List the complications and contra-indication of nutritional therapy.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Causes and consequences of malnutrition in the surgical patient.	Lecture	1	✓	
2	Specific indications of nutritional therapy (enteral and parenteral) and methods of nutritional support			✓	
3	Assessment of nutritional deficiencies in a patient.	Lecture	1	✓	
4	Calculation of calories requirement in a surgical patient			✓	
5	Types of feeding solutions and monitoring of patient's therapy	Lecture	1	✓	
6	Complications and contra-indication of nutritional therapy			✓	
	Total		3	✓	

4. COURSE: PRE-OPERATIVE CARE

CODE: FJ03-GS/4

LEARNING OBJECTIVES:

At the end of this course the third year BDS student will be able to:

- 4.1 Describe in detail the pre- operative preparation of patient for surgery: by history taking, clinical examination, diagnostic and, screening investigations.
- 4.2 Justify the routine and specific pre-operative orders.
- 4.3 List the risk factors affecting the patient's fitness for surgery, and how to prevent postoperative complications.
- 4.4 Discuss how to optimize the patient's pre-operative medical status in high risk patients, including management of diabetes, hypertension, asthma, epilepsy etc. prior to anesthesia and surgery.
- 4.5 Explain precisely the steps to taken for a proper informed consent.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
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1	Pre- operative preparation of patient for surgery: by history taking, clinical examination, and diagnostic, screening investigations and routine and specific pre-operative orders.	lecture	1	✓	
2	Risk factors affecting the patient's fitness for surgery, and how to prevent postoperative complications.	Lecture	1	✓	
3	Discuss how to optimize the patient's pre-operative medical status in high risk patients.	lecture	1	✓	
4	Steps to taken for a proper informed consent.			✓	
	Total		3	✓	

5. COURSE: POSTOPERATIVE CARE

CODE: FJ03-GS/5

LEARNING OBJECTIVES:

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 5.1 Discuss the management of patient in recovery room and in surgical ward.
- 5.2 Explain the precise procedural steps of following postoperative order regarding intravenous fluids, antibiotics, and analgesics,
- 5.3 Prioritize the post- operative management of 'High Risk patients' like, Diabetes, hypertension, asthma, other respiratory diseases, renal disease, and ischemic heart disease.
- 5.4 Enumerate the common and serious postoperative complications, their clinical features, prophylactic measures and treatment.
- 5.5 Describe the system of daily entries in patients' records and discharges

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Discuss the management of patient in recovery room and in surgical ward.	Lecture	1		
2	Describe the precise procedural steps of following postoperative order regarding intravenous fluids, antibiotics, and analgesics,			2	
3	Discuss the post- operative management of 'High Risk patients' that is patients with Diabetes, hypertension, asthma, other respiratory diseases, renal disease, and ischemic heart disease.	Lecture	1	2	
4	Describe the common and serious postoperative complications, their clinical features, prophylactic measures and treatment.	Lecture	1	2	
5	Describe the system of daily entries in patients' records and discharges	Lecture	4	4	
	TOTAL		4	10	

6. COURSE: ANAESTHESIA AND PAIN RELIEF
CODE: FJ03-GS/6

LEARNING OBJECTIVES:

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 6.1 Define local and general anesthesia.
- 6.2 List the name of anesthetic drugs, and outline of their actions and complications.
- 6.3 Discuss the stages of general anesthesia and how to monitor the patient during anesthesia.
- 6.4 Describe how to maintain airway during anesthesia.
- 6.5 List the items/ instruments used in general anesthesia and how to use them.
- 6.6 Classify details of local anesthesia and different techniques including, drugs, dosage and their toxicity.
- 6.7 Discuss how to manage the complications of local anesthesia.
- 6.8 List the different methods of providing pain relief, management of chronic pain and pain from malignant diseases
- 6.9 Describe the on hands use of Instruments used for anesthesia: ambo bag, laryngoscope, Endotracheal tube, laryngeal mask, Guedel's airway. Spinal needle.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Define local and general anesthesia.	Lecture			
2	List the name of anesthetic drugs, and outline of their actions and complications.			✓	
3	Discuss the stages of general anesthesia and how to monitor the patient during anesthesia.			✓	
4	Describe how to maintain airway during anesthesia.	Lecture		✓	
5	Shows pictures of Instruments used in operation theatre for anesthesia: ambo bag, laryngoscope, endotracheal tube, laryngeal mask, Guedel airway. Spinal needle.			✓	
6	Classify details of local anesthesia and different techniques including, drugs, dosage and their toxicity.	Lecture		✓	
7	Discuss how to manage the complications of local anesthesia.			✓	
8	List the different methods of providing pain relief, management of chronic pain and pain from malignant diseases	Lecture		✓	
9	Demonstrate Instruments used for anesthesia: ambo bag, laryngoscope, Endotracheal tube, laryngeal mask, Guedel's airway. Spinal needle.	SGD		✓	✓
	Total		4		

7. COURSE: WOUND AND ITS REPAIR.
CODE: FJ03-GS/7

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 7.1 Classify the different types of wounds and scars
- 7.2 Describe the phases of wound healing and the factors influencing the healing of a wound.
- 7.3 Discuss healing by primary and secondary intention.
- 7.4 Enumerate the causes of non-healing and delayed wound healing
- 7.5 Explain the management of non-healing wounds and scars.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Different types of wounds and scars	Lecture	1		
2	Describe the phases of wound healing and the factors influencing the healing of a wound.			✓	
3	Healing by primary and secondary intention.	Lecture	1	✓	
4	Causes of non-healing and delayed wound healing.			✓	
5	Management of non –healing wounds and scars.			✓	✓
	Total		2		

8. COURSE: SHOCK.
CODE: FJ03-GS/8

LEARNING OBJECTIVES:

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 8.1 Define shock and its types.
- 8.2 Discuss the Patho-physiology and pattern of different types of shock.
- 8.3 Explain the normal physiological response of body to shock.
- 8.4 List the various causes of Hypovolemic, hemorrhagic and septicemic shock.
- 8.5 Differentiate between Hypovolemic, hemorrhagic and septicemic shock based on clinical presentation.
- 8.6 Discuss the management of Hypovolemic, and septicemia shock.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Definition of Shock and its types.	Lecture	1	✓	
2	Discuss the Patho-physiology and pattern of different types of shock.			✓	
3	Explain the normal physiological response of body to shock.			✓	
4	List the various causes of Hypovolemic, hemorrhagic and septicemic shock.	Lecture	1	✓	
5	Differentiate between Hypovolemic, hemorrhagic and septicemic shock based on clinical presentation			✓	

8.6	Discuss the management of Hypovolemic, and septicemic shock.	Lecture	1	✓	✓
	Total		3		

9. COURSE: HAEMORRHAGE, BLOOD TRANSFUSION.

CODE: FJ03-GS/9

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

9.1 Define hemorrhage. Discuss the types and pathophysiology of hemorrhage.

9.2 Explain the basic knowledge of blood and different blood products.

9.3 Enumerate the indications for blood transfusion and transfusion reactions.

9.4 Discuss the management of transfusion reactions.

9.5 List the universal guidelines of blood transfusion.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Hemorrhage: types and pathophysiology	Lecture	1	✓	
2	Blood and different blood products	Lecture	1	✓	
3	Indications for Blood transfusion			✓	
4	Transfusion reactions and management	Lecture	1	✓	✓
5	Guidelines for blood transfusion			✓	✓
	Total		3		

10. COURSE: OPERATING ROOM PROTOCOLS, STERILIZATION AND DISINFECTION.

CODE: FJ03-GS/10

LEARNING OBJECTIVES:

At the end of this course the third year BDS student will be able to:

10.1 Describe the different methods and techniques for sterilization and disinfection.

10.2 Describe the basic principles of sterile and aseptic techniques used in the operating room.

10.3 List the various techniques of chemical and physical sterilization and their application.

10.4 Demonstrate the steps of proper scrubbing, gowning and gloving.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Different methods and techniques for sterilization and disinfection. Operation theatre visit: To show the structure of operation theatre, arrangement and Equipment used in OT.	SGD	1	✓	

2	Basic principles of sterile and aseptic techniques used in the operating room.	Lecture		✓	
3	List the various techniques of chemical and physical sterilization and their application.		1		
4	Discuss the importance of sterilization and disinfection.				
5	Demonstrate the steps of proper scrubbing, gowning and gloving.	Worksh op	2		
Total			2		

11. COURSE: DIAGNOSTIC MODALITIES OF SURGICAL IMPORTANCE (HEMATOLOGICAL AND RADIOLOGICAL)
CODE: FJ03-GS/11

LEARNING OBJECTIVES:

At the end of this course, the third year BDS student will be able to:

- 11.1 List the common diagnostic modalities encountered in surgical practice.
- 11.2 Select surgical case specific hematological and radiological modalities
- 11.3 Justify the choice of surgical case specific hematological and radiological modalities.
- 11.4 Discuss the management of complications pertinent to invasive investigative modalities.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Discuss common laboratory and radiological investigation	Lecture	1	✓	
2	Justify the selection of these investigations according to particular surgical cases.			✓	
3	Discuss the complications and hazards of radiological and invasive investigative modalities			✓	
Total			1		

12. COURSE: COMMON SURGICAL INFECTIONS AND THEIR MANAGEMENT.
CODE: FJ03-GS/12

LEARNING OBJECTIVES:

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 12.1 Classify common surgical infections and their severity.
- 12.2 Discuss the factors that causes wound infections.
- 12.3 Explain complications resulting from surgical infections..
- 12.4 Describe the management of common surgical infections

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
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1	Different types of common surgical infections and their severity	Lecture	1	✓	
2	Determining factors for development of infections			✓	
3	Causes of complications of surgical infections	Lecture	1	✓	
4	Management of common surgical infections.			✓	
Total			2		

13. COURSE : SPECIAL SURGICAL INFECTIONS (TETANUS AND GAS GANGRENE)

CODE: FJ03-GS/13

LEARNING OBJECTIVES:

At the end of this 1 hour lecture, the third year BDS student will be able to:

13.1 Discuss the etiology, Patho-physiology, clinical features and management of Gas Gangrene and Tetanus.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Etiology, Patho-physiology, clinical features and management of Gas Gangrene and Tetanus.	Lecture	1	✓	
Total			1		

14. COURSE: TRACHEOSTOMY

CODE: FJ03-GS/14

LEARNING OBJECTIVES:

At the end of this 1 hour lecture, the third year BDS student will be able to:

14.1 List the indications of Tracheostomy (elective and emergency).

14.2 Briefly discuss the procedure of Tracheostomy especially focus on anatomical structures.

14.3 Enumerate the post-operative complications of Tracheostomy.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	List the indications of Tracheostomy (elective and emergency).	Lecture	1	✓	
2	Differentiation between Emergency and Elective Tracheostomy			✓	
3	Discuss the procedure of Tracheostomy especially focus on anatomical structures			✓	
4	Post-operative complications of Tracheostomy procedure			✓	✓
Total			1		

15. COMMON SKIN AND SOFT TISSUE PROBLEMS: LUMPS, ULCERS, ABSCESS, SINUS, AND FISTULA.

CODE: FJ03-GS/15

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

15.1 Define lumps, sinus, fistula, abscess, and boil.

15.2 Discuss their etiology, Patho- physiology and complications.

15.3 Justify their diagnosis based on their history, clinical examination, investigations and management.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Define lumps, sinus , fistula, abscess, and boil.	Lecture	1	4	3
2	Discuss Etiology, Patho- physiology and complications.				
3	Explain diagnosis based on their history, clinical examination and investigations and treatment.				
Total			1	4	3

16. COURSE: BENIGN AND MALIGNANT SKIN AND SOFT TISSUE LESIONS.**CODE: FJ03-GS/16****LEARNING OBJECTIVES:**

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 16.1 Classify benign and malignant skin and soft tissue lesions.
- 16.2 Discuss causes, predisposing factors and Pathophysiology of common benign and malignant skin lesions.
- 16.3 Describe the differential diagnosis, clinical features and management of common skin and soft tissue lesions
- 16.4 Demonstrate examination of all superficial groups of lymph nodes

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Classify benign and malignant skin and soft tissue lesions.	Lecture	1	✓	
2	Causes, predisposing factors and Pathophysiology of common benign and malignant skin lesions.	Lecture	1	✓	✓
3	Differential diagnosis, Clinical features and Management of common benign and malignant soft tissue lesions				
4	Examination of all superficial groups of lymph nodes (cervical, axillary, inguinal) & practice session	Bedside teaching		✓	✓
Total			2		

17. COURSE: CLEFT LIP AND PALATE.**CODE:FJ03-GS/17****LEARNING OBJECTIVES:**

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 17.1 Discuss the normal embryological development of cleft lip and palate.
- 17.2 Describe the types, etiology and complications of cleft lip and palate.
- 17.3 Explain the management of cleft lip and palate and associated problems.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Normal embryological development of cleft lip and palate .				

		Lecture	1		
2	Types, etiology and complication of cleft lip and palate			✓	✓
3	Discuss the management of cleft lip and palate. And associated problems.	Lecture	1	✓	✓
	Total		2		

18. COURSE: SALIVARY GLANDS DISEASES.

CODE: FJ03-GS/18

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 18.1 List the different types of salivary glands with their surgical anatomy
- 18.2 Classify the salivary gland diseases including inflammatory, calculus and neoplastic diseases.
- 18.3 Discuss the pathophysiology, clinical features and investigations required for various salivary gland diseases.
- 18.4 Discuss the management of salivary gland benign and malignant diseases and post-operative complications.
- 18.5 Demonstrate examination of salivary glands.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Different types of salivary glands and their surgical anatomy of salivary glands	Lecture	1	✓	
2	Presentation, pathophysiology and clinical features of salivary gland diseases including inflammatory, calculus and neoplastic diseases	Lecture	1	✓	✓
3	Investigations required for various salivary gland diseases.			✓	✓
4	Management of salivary gland diseases.	Lecture	1	✓	✓
5	Post-operative complications of salivary gland surgery				
6	Demonstrate examination of salivary glands.	Bedside teaching			✓
	Total		3		

19. COURSE: NECK SWELLINGS

CODE: FJ03-GS/19

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 19.1 Describe the anatomy of the neck triangles.
- 19.2 Classify neck swellings according to neck triangles.
- 19.3 Describe the Pathophysiology and clinical features, differential diagnosis of congenital and acquired, midline and lateral neck swellings.
- 19.4 Discuss investigations and management of neck swellings.
- 19.5 Demonstrate history taking and clinical examination of neck swellings.
- 19.6 Demonstrate examination of cervical lymph nodes.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
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1	Anatomy of neck triangles. Classification of neck swellings	Lecture	2	✓	
2	Describe the Pathophysiology and clinical features of congenital and acquired neck swellings.				
3	Discuss the Investigations and Management of neck swellings.	Lecture	2	✓	✓
4	Demonstrate history taking and clinical examination of neck swellings & practice session.	Bedside teaching			✓
5	Demonstrate cervical lymph nodes examination.	SGD			✓
	Total		4		

20. COURSE: THE THYROID AND PARATHYROID GLANDS

CODE: FJ03-GS/20

LEARNING OBJECTIVES:

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 20.1 Describe the brief embryology, anatomy, and physiology of the thyroid and parathyroid glands.
- 20.2 Discuss the importance of different investigations used to diagnose thyroid diseases.
- 20.3 Briefly describe the congenital anomalies of thyroid gland.
- 20.4 Discuss the causes, presentation and management of hypothyroidism.
- 20.5 Define goiter and its various types. Discuss the causes, clinical features and treatment options of hyperthyroidism.
- 20.6 Discuss the causes, clinical features and treatment options of solitary thyroid nodule.
- 20.7 Thyroid neoplasm: classification, causes, presentation and management.
- 20.8 Describe the preparation of thyroid patient for surgery and post-operative complications.
- 20.9 Demonstrate proper history taking and clinical examination of a thyroid.
- 20.10 Briefly discuss the disorders of Parathyroid gland.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND LEARNING TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Anatomy, physiology, congenital anomalies and of thyroid gland and Parathyroid glands. Discuss the importance of different investigations used to diagnose thyroid diseases.	Lecture	1	✓	
2	Congenital anomalies of thyroid gland. Discuss the causes, presentation and management of hypothyroidism.	Lecture	1	✓	
3	Define goiter and its various types. Discuss the causes, clinical features and treatment options of hyperthyroidism. Discuss the causes, clinical features and treatment options of solitary thyroid nodule.	Lecture	1	✓	
4	Thyroid neoplasm: classification, causes, presentation and management. Thyroid surgery: indication, preparation, complications.	Lecture	1	✓	

	Brief discussion on of Parathyroid gland diseases				
5	History taking of a patient with Thyroid gland disease	BST			✓
6	Examination of a patient with Thyroid gland disease	BST			✓
	Total		4		

21. COURSE: BURNS

CODE: FJ03-GS/21

LEARNING OBJECTIVES:

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 21.1 Discuss the different types of burns, and explain the preventive measures.
- 21.2 Describe the Pathophysiology and different degrees of burns according to depth.
- 21.3 Define the criteria for admission in burns unit.
- 21.4 Demonstrate the assessment of burns surface area, by different methods.
- 21.5 Explain the resuscitative measures, and the methods of calculating the fluid requirement for burn patient.
- 21.6 Discuss the outline of surgical management of burns wound including, the concepts of various skin grafts.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Types of burns, preventive measures. Pathophysiology and different degrees of burns according to depth. Criteria for admission in burns unit and Pathophysiology of burns.	Lecture	1	✓	✓
2	Assess the burns surface area.	Lecture	1	✓	✓
3	Resuscitative measures, and the methods of calculating the fluid requirement for burn patient.			✓	
4	Outline of surgical management of burns wound including, the concepts of various skin grafts.			✓	
	Total		3		

22. COURSE: TRAUMA

CODE: FJ03-GS/22

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 22.1 Define trauma and ABC of resuscitation
- 22.2 Describe the principle of triage.
- 22.3 Discuss principles of primary and secondary survey and resuscitation according to Advanced Trauma Life Support (ATLS) Protocols.

- 22.4 Discuss the importance of AMPLE history taking in a patient with trauma and of secondary survey according to ATLS principles.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	Hours
1	ABC of trauma and resuscitation, and principles of triage.	Lecture	1	✓	✓
2	Principles of primary and secondary survey and resuscitation according to Advanced Trauma Life Support (ATLS) Protocols.			✓	
3	Importance of AMPLE history taking in a patient with trauma and of secondary survey according to ATLS principles.	Lecture	1	✓	✓
	Total		2		

23. COURSE: PRINCIPLES OF MANAGEMENT OF HEAD INJURIES. CODE: FJ03-GS/23

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 23.1 List the types and severity of head injuries.
 23.2 Discuss the pathogenesis, assessment and categorization of a patient with head injuries according to the Glasgow Coma Scale (GCS).
 23.3 Justify the investigations and their interpretations required in the diagnosis and management of patients with head injuries
 23.4 Discuss the management of head injuries in patients presenting to the hospital.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Types and severity of head injuries.	Lecture	1	✓	
2	Pathogenesis of different head injuries.			✓	
3	Assessment and categorization of a patient with head injuries according to the GCS scale.			✓	✓
4	Investigations and their interpretations required in the diagnosis and management of patients with head injuries.	Lecture	1	✓	✓
5	Management of head injuries in patients presenting to the hospital			✓	✓
	Total		2		

24. COURSE: MAXILLOFACIAL TRAUMA. CODE: FJ03-GS/24

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 24.1 Classify the life threatening nature of facial injuries, associated with airway and head and spinal injuries.
 24.2 Classification of facial fractures.
 24.3 Discuss the diagnosis and management of maxillofacial injuries, including mandible fractures.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
1	Classify the life threatening nature of facial injuries, associated with airway and head and spinal injuries	Lecture	1	✓	✓
2	diagnosis and management of maxillofacial injuries, including mandible fractures	Lecture	1	✓	✓
	Total		2		

25. COURSE: SPINAL TRAUMA**CODE: FJ03-GS/25****LEARNING OBJECTIVES:**

At the end of this course , the third year BDS student will be able to:

- 25.1 Describe the assessment of spinal injuries based on history, neurological examination and diagnostic imaging.
 25.2 Discuss the outline of management of cervical spine injuries.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Describe the assessment of spinal injuries based on history, neurological examination and diagnostic imaging.	Lecture	1	✓	
2	Discuss the outline of management of cervical spine injuries.				
	Total		1		

26. COURSE: CHEST AND ABDOMINAL TRAUMA**CODE: FJ03-GS/26****LEARNING OBJECTIVES:**

At the end of this 1 hour lecture, the third year BDS student will be able to:

- 26.1 Describe the surgical anatomy of the chest and abdomen.
 26.2 Discuss the outline of the Pathophysiology of chest injuries including tension pneumothorax, open pneumothorax, haemothorax, flail chest, pulmonary contusions, cardiac tamponade and other lethal injuries.
 26.3 Elicit the physical examination according to clinical presentation, diagnosis and management of these injuries.
 26.4 Explain the Pathophysiology of abdominal injuries, mechanism of injuries, clinical assessment and use of special investigations and their limitations.
 26.5 Outline the resuscitative measures and definite management plan of life threatening injuries of abdomen.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
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1	Surgical anatomy of the chest and abdomen, in relation to chest and abdominal trauma.	Lecture	1	✓	
2	Outline of the Pathophysiology of chest injuries			✓	✓
3	Physical examination according to clinical presentation, diagnosis and management of these injuries including chest tube insertion			✓	
4	Pathophysiology of abdominal injuries, mechanism of injuries, clinical assessment and use of special investigations and their limitations	Lecture	1	✓	
5	Outline of the resuscitative measures and definite management plan of life threatening injuries of abdomen.			✓	✓
	Total		2		

27. COURSE: VENOUS DISORDERS.

CODE: FJ03-GS/27

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 27.1 Discuss the venous anatomy and the physiology of venous return.
- 27.2 Describe thrombophlebitis, its causes, clinical features and treatment.
- 27.3 Differentiate between thrombophlebitis and deep venous thrombosis..
- 27.4 Describe etiology, pathology, diagnosis, investigation and treatment of DVT.
- 27.5 Describe the prophylactic measures to avoid DVT.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Venous anatomy and venous return and thrombophlebitis	Lecture	1		
2	Differentiation between thrombophlebitis and deep venous thrombosis			✓	
3	Deep vein thrombosis: etiology, pathology, diagnosis, investigation and treatment of DVT, and prophylactic measures.			✓	
	Total		1		

28. COURSE: ARTERIAL DISEASES: (GANGRENE, ANEURYSMS)

CODE: FJ03-GS/28

LEARNING OBJECTIVES:

At the end of this course the third year BDS student will be able to

- 28.1 Define aneurysm, its causes and types of aneurysm.
- 28.2 Discuss briefly the presentation, complications, investigations and treatment options of aneurysm with special reference to abdominal aortic aneurysm.
- 28.3 Describe Gangrene, its definition, types, causes, clinical features, and treatment options.
- 28.4 Demonstrate the clinical examination of Arterial pulses.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
28.1	Arterial aneurysms; causes and types of aneurysm.	Lecture	1	✓	
28.2	Presentation, complications, investigation and treatment options of aneurysm with special reference to abdominal aortic aneurysm			✓	
28.3	Gangrene: definition, types, causes, clinical features, and treatment options.	Lecture	1	✓	✓
28.4	Clinical Examination of arterial pulses.	Bedside Teaching			✓
	Total		2		

29. COURSE: ACUTE ABDOMEN

CODE: FJ03-GS/29

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 29.1 Define acute abdomen, briefly discuss the causes and differential diagnosis of acute abdomen.
- 29.2 Discuss the brief Pathophysiology of common acute abdominal conditions
- 29.3 Describe the clinical presentation, necessary investigations and initial resuscitative measures of acute abdomen.
- 29.4 Elicit a proper History taking of a patient with abdominal pain
- 29.5 Demonstrate the Clinical Examination of abdomen.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Define Acute abdomen, briefly discuss the differential diagnosis especially focus on acute appendicitis, acute cholecystitis, acute pancreatitis, perforated peptic ulcer, acute intestinal obstruction, acute gynecological conditions, and acute urinary tract infection	Lecture	1	✓	

2	Clinical presentation, necessary investigations and initial resuscitative measures of acute abdomen.				
3	History taking of a patient with abdominal pain	Bedside teaching			✓
4	Abdominal Examination				✓
	Total		1	1	2

30. COURSE: ABDOMINAL WALL HERNIAS CODE: FJ03-GS/34

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 30.1 Define Hernia, Summarize the basic anatomy of abdominal wall and its natural or acquired weaknesses.
- 30.2 Classify the various types of abdominal wall hernia and their causes.
- 30.3 Describe the clinical presentation and their complications.
- 30.4 Discuss the outlines of different treatment options of hernia.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Anatomy of abdominal wall.	Lecture	1	✓	
2	Definition of hernia and classify different types of hernia				
3	Causes, clinical presentations and complications of different types of hernia and the History & Examination of a patient presenting with an abdominal wall hernia				
4	Discuss the different treatment options of hernia surgery				
	Total		1		

31. COURSE: BEDSIDE CLINICAL TEACHING CLINICAL ROTATION (7 WEEKS) CODE: FJ03-GS/30

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

- 31.1 Obtain proper history of patients presenting with swellings, thyroid disorders, abdominal pain, wounds and ulcers following the standard protocols.
- 31.2 Perform general physical examination on patients presenting to the OPD.

31.3 Understand bedside manners.

32. 4 Perform examination of swelling, ulcer and lymph nodes.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	History taking in general & practice session				✓
2	General physical examination & practice session				✓
3	History taking: pain, swelling, ulcer, abdominal pain,				✓
4	History and examination of goiter.				✓
5	Examination of swelling, ulcer& practice session.				✓
6	Examination of lymph nodes (cervical, axillary, inguinal) & practice session				✓
7	Examination of thyroid& practice session				✓
8	Abdominal examination& practice session				✓
9	Examination of arterial pulses & practice session.				✓
	Total		60		

32 COURSE: WORKSHOPS

CODE: FJ03-GS/31

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

32.1 Demonstrate scrubbing, gowning and gloving.

32.2 Demonstrate suturing and knot tying.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

S.R	Topics	MIT	Hours	BCQ	OSCE
1	Workshops on scrubbing, gowning and gloving.	SGD	4		✓
2	Workshop on suturing and knot tying.	SGD	6		✓

33. COURSE: SUTURE MATERIAL, SURGICAL INSTRUMENTS AND BASIC SURGICAL SKILLS.

CODE: FJ03-GS/32

LEARNING OBJECTIVES:

At the end of this course , the third year BDS student will be able to:

33.1 Discuss suture materials: their classification, characteristics, and uses for specific procedure.

1. Demonstrate commonly used surgical instruments and their uses like needle holder, retractors, forceps, artery forceps, spoon curette, Babcock forceps, Ali's forceps, self retaining retractor, scalpel handle etc.
2. Demonstration of surgical items like: radiovac drains, urine bag, intravenous cannula, catheters etc.
3. Workshop on suturing and knotting.
4. Demonstrate the insertion of Foley's catheter its indication and complications.
5. Demonstrate the insertion of nasogastric tube insertion, its indication and complications.

LEARNING STRATEGIES: MODE OF INFORMATION TRANSFER AND ASSESSMENT TOOLS

SR	Topics	MIT	Hours	BCQ	OSCE
33.1	Suture materials, classification its characteristics and uses.	SGD	2		1
33.2	Surgical instruments: identification, uses, sterilization.	SGD	4		1
33.3	Demonstrate surgical items like: drains, tubes and catheters,	SGD	2		1
33.4	Workshop on knotting and suturing				
33.5	Demonstrate the insertion of Foley's catheter.	SGD	2		1
33.6	Demonstrate the insertion of nasogastric tube insertion	SGD	2		1
	Total		12		5

GENERAL MEDICINE GUIDE BOOK FOR THIRD YEAR BDS

COURSE DESCRIPTION AND RATIONALE:

This course introduces the etiology, pathogenesis, clinical features, investigation, management and prevention of prototypical diseases of cardiovascular system, respiratory system, endocrinology, neurology, nephrology, infectious diseases, rheumatology and hematology. This course prepares the dental students for dealing with common medical conditions encountered in routine practice

COURSE DURATION: One year

RATIONALE

Dental surgeons need to have a sound knowledge of medical conditions like Diabetes, hypertension .Bleeding diathesis and infectious diseases because patients presenting for dental treatment may have co-morbid condition which may affect the outcome of their dental treatment. Similarly there are certain infectious diseases which may spread from patients to patient and from patient to doctors. The knowledge of these diseases are essential for dental graduates from the prevention and safety points of view.

LEARNING OUTCOMES: The student will be able to:

1. Describe the etiology, pathogenesis clinical features of different medical conditions along with their management.
2. Make a list of differential diagnosis on the basis of clinical scenario
3. Describe lab report related to diseases of different system and their clinical co-relation.
4. Describe chest x ray finding, in different Respiratory and Cardiovascular conditions.
5. Describe electrocardiographic finding, and their clinical co relation.
6. Identify characteristic pictures of different diseases helpful in the diagnosis
7. Make a therapeutic plan for the management of different diseases.
8. Describe the complications of different diseases and their management
9. Take clinical history, carry out Physical examination and pick different physical signs.
10. Identify instruments, their indications, contraindications, precautions while using.
11. Examine patients and identify clinical signs of different diseases.

MODE OF INFORMATION TRANSFER (MIT):

Lecture timings are representative of whole class. Timings for tutorials, workshops, small group discussion (SGD), Case Based Discussion, bed side teaching (BST), e-learning (e-L) quiz, and journal club (JC), task based learning (TBL), are for individual rotation groups.

COURSE NAME: CVS

COURSE CODE: FJ03-GM-1

Learning objectives: At the end of the course, the student should be able to:

1.1 Discuss the etiology, clinical features, physical findings, ECG manifestations, treatment and complications of ischemic heart disease (IHD)

- Angina pectoris
- Myocardial infarction

1.2 Discuss the etiology, pathogenesis, clinical features, diagnostic criteria, treatment and complications of Rheumatic fever (RF)

1.3 Discuss the etiology, clinical features, diagnosis, treatment and complications of Infective Endocarditis

1.4 Discuss the etiology, pathogenesis, clinical features, investigation, diagnosis, management and complication of Valvular heart disease.

- Mitral stenosis
- Mitral regurgitation
- Aortic stenosis
- Aortic regurgitation

1.5 Discuss the etiology, clinical features, physical findings, investigation, management and complication of congenital heart disease.

- Ventricular septal defect
- Tetralogy of fallot

1.6 Discuss the etiology, clinical features, investigations, treatment and complications of Hypertension

1.7 Discuss the etiology, clinical features, investigation, treatment and complication of Heart Failure.

1.8 Demonstrate the general physical signs related to cardiovascular disease like Anemia, clubbing, cyanosis, JVP, edema, splinter haemorrhages, osler nodes, xanthelasma and demonstrate the examination of precordium.

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Ischemic heart disease (Angina pectoris)	LEC	1		
2	Ischemic heart disease (Myocardial infarction)	LEC	1		
3	Rheumatic fever (RF)	LEC	1		
4	Valvular heart disease.	LEC	1		
5	Congenital heart disease	LEC	1		
6	Hypertension	LEC	1		
7	Infective Endocarditis	LEC	1		
8	CHF	LEC	1		
9	History of a patient with cvs	BST	2		
10	C.V.S. examination	BST	2		
11	Interpretation of ECG	SGD	2		

12	Orientation about echocardiography	SGD	2		
13	Hypertension	CBD	2		
14	Ischemic heart disease	CBD	2		
15	Valvular Heart Disease	BST	2		
16	Rheumatic fever	SGD	2		
17	Congenital Heart Disease	CBD	2		
18	Revision of Examination	BST	2		
	Total		26		

COURSE NAME: RESPIRATORY SYSTEM

COURSE CODE: FJ03-GM-2

Learning objectives: At the end of the course, the student should be able to:

2.1 Discuss the etiology, clinical features, investigation, differential diagnosis, treatment and complications of Pulmonary and Extra pulmonary tuberculosis and MDR and X-DR T.B.

2.2 Discuss the risk factors, etiology, pathogenesis, GOLD guidelines, pulmonary function test (PFT), Chest x-ray finding. Treatment, complications of chronic obstructive pulmonary disease

2.3 Describe the etiology, classification, clinical features examination and radiological findings, treatment and complications of Pneumonia.

Community acquired pneumonia (CAP)

Hospital acquired pneumonia (HAP)

Ventilator acquired pneumonia.

2.4 Discuss the etiology, presentation, pulmonary function test, steps in the treatment and complication of Asthma

2.5 Describe different types, clinical features, extra pulmonary manifestations, investigations and treatment of Bronchogenic Carcinoma

2.6 Discuss etiology, presentation and treatment, CXR finding and complications of Bronchiectasis.

2.7 Discuss the causes, types, LIGHTS criteria, CXR findings, examination finding, and treatment of Pleural effusion.

2.8 Discuss the primary and secondary causes, diagnosis, signs and symptoms and treatment of Pneumothorax.

2.9zzExamine the chest anteriorly and posteriorly and pick the relevant general physical signs like cyanosis, clubbing, lymphadenopathy, pedal edema and flapping tremor

2.10 Pick the radiological findings of major lung diseases.

- Pleural effusion
- Pneumothorax
- Pulmonary edema
- Lung abscess
- Consolidation
- Collapse

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Tuberculosis	LEC	2		
2	Chronic obstructive lung disease (COPD)	LEC	1		
3	Pneumonia	LEC	1		
4	Asthma	LEC	1		
5	Carcinoma of lung	LEC	1		
6	Bronchiectasis	LEC	1		
7	Pleural effusion	LEC	1		
8	Pneumothorax	LEC	1		
9	History of patient with Respiratory disease	SGD	2		
10	Examination of chest	BST	2		
11	Chest X ray (CXR)	SGD	2		
12	Interpretation of PFTS	SGD	2		
13	Revision of examination	SGD	2		
14	Pneumonia	SGD	2		
15	Asthma	CBL	2		
16	Pleural effusion	CBL	2		
17	COPD	TBL	2		
17	Revision of Examination	SGD	2		
	TOTAL		27		

COURSE NAME: Endocrinology**COURSE CODE:** FJ03-GM-3

Learning objectives: At the end of the course, the student should be able to:

- 3.1 Discuss the etiology, clinical features, investigation, diagnosis, treatment and complications of Acromegaly.
- 3.2 Discuss the etiology, clinical features, investigation diagnosis treatment and complication of Hypopituitarism..
- 3.3 Discuss the etiology, clinical features, investigation, diagnosis, treatment and complications of Hyperthyroidism.
- 3.4 Discuss the etiology, clinical features, investigation, diagnosis, treatment and complications of Hypothyroidism
- 3.5 Discuss the interpretation of Thyroid function test.

- 3.6 Discuss the etiology, clinical features, investigation, treatment and complications of Adrenal disorders.
- 3.7 Discuss the etiology, clinical features, investigation, treatment and complication of parathyroid diseases.
- 3.8 Discuss Diabetes Mellitus in detail, its classification, clinical manifestations, diagnostic criteria, treatment and short term and long term complications of DM and their management.
- 3.9 Discuss about signs and symptoms, treatment and prevention of vitamin deficiencies.

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Acromegaly	LEC	1		
2	Hypopituitarism	LEC	1		
3	Hyperthyroidism	LEC	1		
4	Hypothyroidism	LEC	1		
6	Adrenal disorders	LEC	1		
/	Parathyroid diseases	LEC	1		
7	Diabetes mellitus	LEC	1		
8	Complications of Diabetes	LEC	1		
9	Vitamin Deficiencies	LEC	1		
10	Examination of diabetic patient	BST	2		
11	Cushing syndrome	CBL	2		
12	Hyperthyroidism/Hypothyroidism	TBL	2		
13	Thyroid function Test	SGD	1		
14	Diabetes mellitus	JC	2		
15	Addison disease	CBL	2		
16	Panhypopituitarism	SGD	2		
	Total		22		

COURSE NAME: Neurology

COURSE CODE: FJ03-GM-4

Learning objectives: At the end of the course, the student should be able to:

- 4.1 Discuss different types of headache, approach to the patient with headache, Treatment of different types of headaches.
- 4.2 Discuss about different types of Stroke. Discuss risk factors for stroke. Investigation and management
- 4.3 Discuss the causes, clinical features, investigation and treatment of Dementia..
- 4.4 Discuss about Meningitis. Its investigation, diagnosis, treatment and complication..
- 4.5 Discuss different types of epilepsy, difference between fits and pseudo fits. Investigation and management of Epilepsy.
- 4.6 Discuss the basic facts about Parkinson's disease and its management.
- 4.7 Discuss the etiology, clinical features, investigation and treatment of Movement Disorders
- 4.8 Discuss the examination of cranial nerves. Examination of motor system, sensory system, cerebellum and its clinical relevance.

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Headache	LEC	1		
2	Stroke	LEC	1		
3	Dementia	LEC	1		
4	Meningitis	LEC	1		
5	Epilepsy	LEC	1		
6	Parkinson's disease and Movement disorders	LEC	1		
7	History of patient with neurological problem	BST	2		
8	Examination of motor and sensory system	BST	2		
9	Examination of cranial nerves	BST	2		
10	Examination of Cerebellum	BST	2		
11	Epilepsy	CBL	2		
12	Headache	TBL	2		
13	Meningitis	SGD	2		
14	Stroke	CBL	2		
15	Trigeminal neuralgia	CBL	2		
16	Revision of Examination	TBL	2		
	TOTAL		26		

COURSE CODE: FJ03-GM-5

Learning objectives: At the end of the course, the student should be able to:

5.1 Discuss about definition, causes, investigation and treatment and complication of acute renal failure.

5.2 Discuss about definition, causes, investigation, treatment and complication of chronic kidney disease.

5.3 Discuss causes, investigation and treatment of Urinary tract infection (UTI).

5.4 Briefly discuss about the diagnostic criteria of nephritic syndrome, its causes, investigations and management.

5.5 Briefly discuss about the diagnostic criteria of Nephrotic syndrome, its causes, investigations and management.

5.6 Discuss about Electrolyte imbalance.

- Hyponatremia

- Hyponatremia

- Hyperkalemia

- Hypokalemia

5.7 Interpret urea, creatinine, electrolytes labs.

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Acute kidney injury	LEC	1		
2	Chronic kidney disease	LEC	1		
3	Urinary tract infection (UTI)	LEC	1		
4	Nephritic syndrome	LEC	1		
5	Nephrotic syndrome	LEC	1		
6	Electrolyte imbalance	LEC	1		
7	Interpretation of urea, creatinine and electrolytes	SGD	2		
8	Nephritic/Nephrotic syndrome	CBL	2		
9	Urinary tract infection (UTI)	TBL	2		
10	Chronic kidney disease	SGD	2		
11	Acute kidney injury	TBL	2		
12	Electrolyte Imbalance	TBL	2		
	TOTAL		18		

COURSE NAME: INFECTIOUS DISEASE

COURSE CODE: FJ03-GM-6

Learning objectives: At the end of the course, the student should be able to:

6.1 Discuss the etiology, clinical features, investigation , treatment and complication of Malaria..

6.2 Discuss about signs symptoms investigation and treatment of Viral Fever (Dengue, Congo Crimean fever, Influenza, Chikungunya and Covid 19)

6.3 Discuss about Acute Infectious Diarrhea.;its causes, severity, assessment , investigation and management.

6.4 Discuss about Human immunodeficiency virus (HIV).Discuss about signs symptoms investigation and treatment of HIV.

6.5 Discuss about Mumps, diphtheria, tetanus.

6.6 Discuss about Hospital acquired infections.

6.7 Discuss about Fever and sepsis, SIRS, MODS, basics management of sepsis..

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Malaria	LEC	1		
2	Human immunodeficiency virus(HIV)	LEC	1		
3	Mumps,, tetanus	LEC	1		
4	Hospital acquired infection	LEC	1		
5	Fever sepsis	LEC	1		
6	Viral fever	LEC	1		
7	Sepsis	CBL	2		
8	Human immunodeficiency virus(HIV)	SGD	2		
9	Examination of patient with fever	BST	2		
10	History of patient with viral illness	BST	2		
11	History of patient with bacterial infection	BST	2		
12	Revision of examination	BST	2		
	TOTAL		18		

COURSE NAME: Hematology

COURSE CODE: FJ03-GM-7

Learning objectives: At the end of the course, the student should be able to:

7.1 Discuss about signs, symptoms, investigation and treatment of Anemia. Also discuss different types of anemia, classification according to size of RBC. Nutritional deficiency anemia.

7.2 Discuss the etiology, different types, clinical features, investigation, diagnosis, treatment of Leukemia

7.3 Discuss the etiology, different types, clinical features, investigation, diagnosis, treatment of Lymphoma

7.4 Discuss the etiology, different types, clinical features, investigation, diagnosis, treatment and complication of Thrombocytopenia

7.5 Discuss the etiology, pathogenesis, clinical features, investigation, diagnosis, treatment and complication of Bleeding Disorders, the use of anticoagulants and antithrombotic therapy.

7.6 Discuss the different causes of Shock and its management

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Anemia	LEC	1		
2	Leukemia	LEC	1		
3	Lymphoma	LEC	1		
4	Thrombocytopenia	LEC	1		
5	Bleeding disorders	LEC	1		
6	Anticoagulant & Antithrombotic therapy	LEC	1		
7	Shock	LEC	1		
8	Lab interpretation	SGD	2		
9	History taking and Examination in blood disorder	BST	2		
10	Lymphoma	TBL	2		
11	Thrombocytopenia	CBL	2		
12	Shock	TBL	2		
13	Bleeding disorders	SGD	2		
	TOTAL		19		

COURSE NAME: Rheumatology

COURSE CODE: FJ03-GM-8

Learning objectives: At the end of the course, the student should be able to:

8.1 Discuss about signs, symptoms, investigation and management of Systemic lupus erythematosus(SLE)

8.2 Discuss about signs, symptoms, investigation and management of Rheumatoid arthritis (RA)

8.3 Discuss about signs, symptoms, investigation and management of Senro-negative Aarthropathies

8.4 Discuss about Osteoporosis/osteomalacia; Their causes, clinical manifestations and treatment.

8.5 Discuss about signs, symptoms, investigation and management of Osteoarthritis

LEARNING STRATEGIES AND ASSESSMENT

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Systemic Lupus Erythematosus (SLE)	LEC	1		
2	Rheumatoid Arthritis (RA)	LEC	1		
3	Senro-negative arthropaties	LEC	1		
4	Osteoporosis / osteomalacia	LEC	1		
5	Osteoarthritis	LEC	1		
6	History & Examination of Rheumatological diseases	BST	2		
7	SLE	CBD	2		
8	Rheumatoid arthritis (RA)	CBD	2		
9	Osteoporosis / osteomalacia	BST	2		
	TOTAL		13		

COURSE NAME: Gastroenterology & Hepatology

COURSE CODE: FJ03-GM-9

Learning objectives: At the end of the course, the student should be able to:

9.1. Discuss the etiology, clinical features, investigation, diagnosis, management and complication of gastrointestinal reflux disease.

9.2 Discuss the etiology, clinical features, investigation, diagnosis, treatment and complication of Peptic ulcer disease/Gastritis

9.3 Discuss the etiology, clinical features, investigation, diagnosis, treatment and complication of Malabsorbtion syndrome

9.4 discuss the etiology, clinical features, investigation, diagnosis, treatment and complication of IBD

9.5 discuss the clinical features, diagnostic criteria and management of IBS.

9.6 Discuss the etiology, clinical features, investigation, diagnosis treatment and complication of Acute and Chronic hepatitis

9.7 Discuss the etiology, clinical features, investigation, diagnosis and management of Chronic liver disease and its complications

- Ascites
- Hepatic encephalopathy
- Spontaneous bacterial peritonitis
- Upper G I bleed
- Hepatocellular carcinoma

9.8 Discuss the interpretation of liver function test.

9.9Examine the abdomen and relevant general physical signs

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Gastroesophageal reflux disease (GERD)	LEC	1		
2	Peptic ulcer disease	LEC	1		
3	Malabsorption Syndrome	LEC	1		
4	Acute and Chronic hepatitis	LEC	1		
5	Chronic liver disease	LEC	1		
6	Hepatocellular carcinoma& other complications of CLD	LEC	1		
7	Inflammatory bowel disease	LEC	1		
8	Irritable Bowel Syndrome	LEC	1		
9	History of gastrointestinal & Liver diseases	SGD	2		
10	Examination of abdomen and relevant physical signs	BST	2		
11	Lab Interpretation	SGD	2		
10	Chronic liver disease	TBL	2		
11	Portal hypertension	CBL	2		
12	Inflammatory bowel disease	SGD	2		
	TOTAL		20		

COURSE NAME: Miscellaneous

COURSE CODE: FJ03-GM-10

Learning objectives: At the end of the course, the student should be able to:

10.1 Identify instruments, their uses, indications, contraindications, precautions while using.

- IV Cannula
- Nasogastric Tube
- Endotracheal Tube
- Foley's catheter
- Insulin Syringe
- Oxygen Mask

10.2 Procedures

- Carryout following procedures
- Administer I/M, I/V and S/C injections
- Maintain I/V line via Cannula
- Perform CPR on mannequin

10.3 Lab Interpretation: Interpret following laboratory tests

- Blood CP
- Liver Function Test
- Thyroid Profile
- FBS, RBS and HbA1c
- PT & aPTT
- Urea, Creatinine, Electrolytes
- Urine D.R.
- 10.4 X-Ray Interpretation
- Interpret X-Ray of Following conditions
- Cardiomegaly
- Consolidation
- Pleural Effusion
- Pneumothorax

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSCE
1	Clinical Instruments	SGD	2		
2	Lab Interpretation	SGD	2		
3	X-Ray Interpretation	SGD	2		
	TOTAL		6		

STUDY GUIDE OF ORAL MEDICINE IN THIRD YEAR BDS

COURSE DESCRIPTION AND RATIONALE:

The oral medicine course constitutes of two main components: Theoretical and Clinical parts. The theoretical part includes lectures that provide insight into most primary and secondary lesions affecting oral and para-oral structures of hard and soft tissues. The clinical part includes cases representative of the primary and secondary oral lesions, covered in oral medicine lectures. They will be evaluated and discussed with the students in small group discussion forms, to refine the students' clinical abilities, and emphasize that treatment of oral medicine cases is multidisciplinary. Clinical cases include: 1. Red and white lesions 2. Single and multiple ulcerations 3. Central and peripheral exophytic lesions 4. Pigmented lesions 5. Acute and chronic infections 6. Systemic diseases with oral manifestations (e.g. diabetes, dermatological diseases...etc.). 7. Lymph-node and salivary gland swellings 8. Orofacial pain and TMJ disorders. 9. Neoplasms (benign and malignant).

LEARNING OUTCOMES:

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

1. Classify, identify the etiology, and describe the clinical pictures of the most common oral lesions.
2. Clarify the diagnostic basis for diseases and conditions in the oral and para- oral structures.
3. Explain the risk factors, prevention and control of common oral and systemic diseases.
4. Execute a systematic clinical extra and intra-oral examination.
5. Differentiate clinically between normal oral variants and pathologic oral lesions, and distinguish suspicious or difficult lesions to be referred for consultation.
6. Develop differential diagnosis of the most common oral lesions, select appropriate diagnostic aids and interpret their results to reach diagnosis of oral lesions.
7. Diagnose and manage the most common oral lesions, formulate appropriate prescriptions for oral medicine cases, recognize the role of the general dental practitioner in early diagnosis of oral lesions, and apply referral or consultation for advanced cases and cases that need different treatment considerations.
8. Outline dental management of some selected systemic disorders by installing precautions and modifications of conventional dental treatment, and describe how to prevent and manage some medical emergencies in the dental clinic.
9. Review mechanisms of action of the most commonly used drugs in dental practice to prescribe proper medication as part of patient management.

10. Show efficient and professional communication with patients, colleagues, instructors, clinical and laboratory staff.

11. Illustrate the importance of lifelong learning and show a strong commitment to it

MODE OF INFORMATION TRANSFER:

Lecture timings are representative of whole class.

Timings of the following are for individual rotation groups:

- Lectures (LEC)
- Small group discussions (SGD)
- Chairside Training (CST)
- Journal Club (JC)
- Demonstrations (DEMO)
- Role Plays (RP)
- Workshop (WS)

COURSE NAME: PRINCIPLES OF INVESTIGATIONS, DIAGNOSIS & RADIOLOGY

COURSE CODE: FJ03-OM-1

COURSE OBJECTIVES:

1.1 Take comprehensive history and discuss the significance of each component.

1.2 Perform intra/extra oral examinations, [TMJ and muscles of mastication, Cervical Lymph nodes, Cranial nerves examination (CN V and VII)]

1.3 Radiology

- Assess and evaluate image quality and reflect on its importance for diagnostic radiology
- Based on a patient's oral and general health status, make an overall assessment of the patient's need for radiography of the teeth and jaw
- Demonstrate an in depth knowledge of and ability to analyse the biological effects of X-ray radiation
- Evaluate, apply different methods concerning radiation protection and to reduce X-ray dosage to patient, staff and attendants in intraoral and panoramic X-ray imaging
- Demonstrate knowledge of the indications for computed tomography (cone beam computed tomography-CBCT) technology and magnetic resonance imaging (MRI)
- Independently review and analyse normal anatomic structures and pathological changes in teeth, jaws and surrounding tissues in an intraoral X-ray image and panoramic x-rays
- Perform X-ray imaging of teeth and alveolar process with digital intraoral technique and be able to /process the images in a relevant way/ perform relevant imaging/
 - Peri-apical views.
 - Bite-wing radiographs.

- SLOB Technique
- Panoramic view.

1.4 Interpret findings on following investigations

- Hematological, radiological, histological, specialized imaging (CT, MRI), molecular, culture & sensitivity, immunohistochemistry.

1.5 Formulate Differentials for common oral pathologies.

1.6 Formulate treatment planning for common oral pathologies.

LEARNING STRATEGIES, OUTCOMES and STRATEGIES: Mode of Information Transfer (MIT)

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	History taking	LEC	2	☐	☐
2.	Investigations	LEC	4	☐	☐
3.	Diagnosis and Treatment planning	LEC	4	☐	☐
4.	Taking complete History and reviewing thorough intra and extra-oral examination	DEMO	4	☐	☐
		CST	10		
5.	Selecting appropriate laboratory Investigations.	SGD	2	☐	☐
6.	Writing referral letters and formulating prescription.	WS	2	☐	☐
	TOTAL		28		

COURSE NAME: Oral Infections

COURSE CODE: FJ03-OM-2

COURSE OBJECTIVES:

33.2 Describe signs, symptoms and clinical features of common oral bacterial infections e.g. Odontogenic infections, cellulites, Ludwig's angina, Actinomycosis, Syphilis.

33.3 Management of patients and enlist drug of choice Reasons of failure of antibiotic therapy.

33.4 Discuss signs, symptoms and clinical features of oral viral infections.

- a) Herpes Simplex virus
- b) Varicella Zoster virus
- c) Coxsackie virus
- d) Epstein Barr virus
- e) Cytomegalovirus
- f) HIV

Management of patients and justify choice of antiviral therapy

33.5 Classify and discuss signs, symptoms and clinical features of oral fungal infections

List investigations required and manage patients Discuss reasons for failure of antifungal therapy

LEARNING STRATEGIES, OUTCOMES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Bacterial infections	LEC	3	☐	☐
2.	Viral infections	LEC	3	☐	☐
3.	Fungal infections	LEC	2	☐	☐
4.	Oral manifestations of HIV & AIDS	LEC	2	☐	☐
5.	Viral, Bacterial and Fungal infections	DEMO	3	☐	☐
		SGD	4	☐	☐
6.	Diagnosis & management of Viral, Bacterial and Fungal infections	CBL	3	☐	☐
	Total		20		

COURSE NAME: ORAL ULCERATIVE LESIONS

COURSE CODE: FJ03-OM-3

COURSE OBJECTIVES: At the end of this course , students will be able to

- 3.1 Classify oral ulcerative lesions on basis of etiology.
- 3.2 Discuss clinical features, investigations and treatment of Non- vesiculobullous conditions of oral cavity.
- 3.3 Discuss clinical features, investigations and treatment of Vesiculobullous conditions of oral cavity.

LEARNING STRATEGIES, OUTCOMES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Classification of oral ulcerative lesions	LEC	2	✓	✓
2.	Non-vesiculobullous conditions	LEC	4	✓	✓
3.	Vesiculo-bullous conditions	LEC	4	✓	✓
4.	Vesiculo-bullous & Non-vesiculobullous conditions	DEMO	4	✓	✓
5.	Non infective stomatitis	SGD	3	✓	✓
5.	Oral Ulcerations	CBL	3	✓	✓
	TOTAL		20		

COURSE NAME: ORAL SOFT TISSUE LESIONS**COURSE CODE: FJ03-OM-4****COURSE OBJECTIVES:** At the end of this course students will be able to

- 4.1 Classify white lesions of oral cavity on the basis of etiology, history and clinical features.
Discuss management options for persistent white lesions.
- 4.2 Classify red lesions of the oral cavity on the basis of etiology, history and clinical features.
Discuss management options for persistent red lesions.
- 4.3 Classify pigmented lesions of the oral cavity. Differentiate between malignant melanoma and other pigmented lesions of the oral cavity. Discuss management of malignant melanoma.
- 4.4 Differentiate between premalignant lesions and conditions. Discuss management of dysplastic lesions. Enlist risk factors for malignant changes in oral premalignant lesions/conditions.

LEARNING STRATEGIES, OUTCOMES AND ASSESSMENT:

S:NO	TOPIC	MIT	Hrs	BCQ	OSPE
1.	White Lesions	LEC	4	✓	✓
2.	Red Lesions	LEC	3	✓	✓
3.	Pigmented Lesions	LEC	2	✓	✓
4.	Premalignant Lesions and Conditions	LEC	4	✓	✓
5.	White and Red lesions and Pigmentation of the Oral Mucosa	DEMO	4	✓	✓
6.	White and Red lesions and Pigmentation of the Oral Mucosa	CBL	2	✓	✓
6.	Miscellaneous benign conditions	SGD	1	✓	✓
	TOTAL		20		

COURSE NAME: MOTOR AND SENSORY CHANGES ON THE OROFACIAL REGION

COURSE CODE: FJ03-OM-5

COURSE OBJECTIVES:

5.1 Differentiate between various presentations of facial pain based on history and examination.
Describe clinical features, diagnosis and management of

- Trigeminal neuralgia
- atypical facial pain
- Burning mouth syndrome

5.2 List causes of facial palsy.

Diagnose and manage patient presenting to Dental OPD with Bell's Palsy.

LEARNING STRATEGIES, OUTCOMES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Facial Pain (TN, AFP, BMS)	LEC	4	✓	✓
2.	Facial Palsy	LEC	2	✓	✓
3.	Facial Pain And Neurological Disturbances (e.g. Bell's Palsy	DEMO	3	✓	✓
		SGD	2	✓	✓
		CST	1	✓	✓
	Total		12		

TN: Trigeminal Neuralgia, AFP: Atypical Facial Pain, BMS: Burning Mouth Syndrome

COURSE NAME: SALIVARY GLAND DISORDERS

COURSE CODE: FJ03-OM-6

COURSE OBJECTIVES: At the end of this course students show be able to

6.1 Classify salivary flow obstruction on the basis of etiology

6.2 Describe the clinical features and management of bacterial and viral sialadenitis.

LEARNING STRATEGIES, OUTCOMES AND ASSESSMENT:

S:NO	TOPIC	MIT	Hrs	BCQ	OSPE
1.	Disturbances of Salivary Flow	LEC	3	✓	✓
2.	Salivary Gland Infections (sialadenitis)	LEC	2	✓	✓
3.	Assessment of Salivary Glands	DEMO	2	✓	✓
4.	Disorders of Salivary glands	SGD	2	✓	✓
5.	Total		9		

COURSE NAME: TEMPOROMANDIBULAR JOINT DISORDERS**COURSE CODE: FJ03-OM-7****COURSE OBJECTIVES:** At the end of this course, students should be able to

- 7.1 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
- 7.2 Enlist common pharmacological treatment options, occupational therapy, splint therapy, alternative medical therapy for pain

LEARNING STRATEGIES, OUTCOMES AND ASSESSMENT:

S:NO	TOPIC	MIT	Hrs	BCQ	OSPE
1.	Evaluation of TMJ Disorders	LEC	3	✓	✓
2.	Treatment of TMJ disorders	LEC	2	✓	✓
3.	TMJ anatomy, TMPDS and Internal Derangement	SGD	4	✓	✓
4.	Investigation of the stomatognathic system	DEMO	1	✓	✓
5	Examination of TMJ	CS	1	✓	✓
	Total		11		

COURSE NAME: SYSTEMIC DISORDERS**COURSE CODE: FJ03-OM-8****COURSE OBJECTIVES:** At the end of this course students should be able to

- 8.1 Discuss clinical consideration for dental management of patients
 - a) With cardiovascular disease
 - b) On warfarin therapy
 - c) On antiplatelet medicationCurrent guidelines for antibiotic prophylaxis for infective endocarditis Oral manifestation of antihypertensive drugs
- 8.2 Discuss management of asthmatic and COPD patient

Describe clinical features, investigation and treatment of Sarcoidosis

8.3 Discuss oral manifestations of GI diseases:

- a) Crohn's Disease
- b) Ulcerative Colitis
- c) Orophacial granulomatosis
- d) Coeliac disease Hepatitis B and C
- e) Hepatitis B and C

Discuss considerations for dental management of patients with IBD, Hepatitis B and C

8.4 Discuss oral manifestation of renal disease and considerations for dental management of patient with chronic renal disease

8.5 Discuss oral manifestation of hematological diseases:

- a) Anemia
- b) Leukaemia
- c) Lymphoma

Discuss considerations for dental management of a patient with hematological disease

8.6 Discuss oral manifestation of hemorrhagic diseases

- a) Purpura
- b) Von Willebrand's disease
- c) Hemophilia

Discuss considerations for dental management of a patient with hemorrhagic disease

LEARNING STRATEGIES, OUTCOME AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Cardiovascular diseases	LEC	3	☐	☐
2.	Respiratory diseases	LEC	3	☐	☐
3.	Celiac Disease, Inflammatory Bowel Disease, Gastro- Oesophageal Reflux Disorder	LEC	3	☐	☐
4.	Renal diseases	LEC	3	☐	☐
5.	Hematological diseases	LEC	3	☐	☐
6.	Hemorrhagic disease	LEC	3	☐	☐
7.	Systemic disorders	SGD	8	☐	☐
	Total		26		

REST OF THE HOURS ARE DEDICATED FOR CLINICAL SETTINGS

STUDY GUIDE OF PERIODONTOLOGY 3RD YEAR BDS PROGRAM

COURSE DESCRIPTION AND RATIONALE:

Study of normal and diseased periodontium. This course includes topics in assessment, etiology, pathology, the histopathology, and role of inflammation in periodontal disease, as well as the classifications and latest changes in classification of periodontal diseases. An emphasis is placed on the application of theory to the clinical setting and treatment modalities.

The main objective of this course is that the students should be able to understand the signs and symptoms of periodontal disease and are competent to accurately assess and effectively treat the disease conditions. The student should be able to communicate and educate their patients accordingly.

COURSE DURATION: 1 Year

LEARNING OUTCOMES: At the end of the course student should be able to

1. Develop a working vocabulary of terms related to periodontics.
2. Develop an understanding of the clinical significance of the tissues of the periodontium, including the anatomy and histology of these tissues.
3. Describe the impact of inflammation and the host defense system in periodontal diseases.
4. Discuss the significance of primary and secondary factors in the etiology of periodontal disease.
5. Recall the risk factors in the development of periodontitis in the susceptible host.
6. Describe the histopathogenesis of periodontal pocket formation.
7. Describe the clinical and histologic tissue responses in the following: gingival enlargement, loss of attachment, recession, repair, regeneration.
8. Recognize, classify, describe, and document clinical findings of periodontal diseases utilizing clinical slides, case studies, and patients treated in the clinic.
9. Apply their theoretical knowledge to the clinical setting and treatment modalities and should be interested in learning latest developing treatment modalities.

MODE OF INFORMATION TRANSFER (MIT):

Lecture (LEC) small group discussion (SGD), chair side (CST), Typodont (TYPO), Workshop (WS), Case based learning (CBL).

COURSE NAME: ANATOMY, BIOLOGY AND DEVELOPMENTAL STRUCTURES OF PERIODONTIUM

COURSE CODE: FJ03-PER-1

Course Objectives: At the end of the course the students should be able to:

- Discuss external anatomic features related to the periodontium.
- Describe types of oral mucosa and their characteristics

- Discuss the macroscopic and microscopic features of gingiva
- Discuss the development of gingiva.
- Describe the blood supply, nerve supply and lymphatics of gingiva.
- Describe structure, cellular composition and extracellular components of PDL.
- Discuss the development of principal fibers of PDL.
- Describe the blood supply, nerve supply and lymphatics of the PDL.
- Describe the various functions of PDL.
- Describe the changes in the PDL space in different clinical conditions.
- Classify different types of cementum.
- Describe composition, functions, vascularization, innervation and characteristics of cementum.
- Describe the structures involved in cemento-enamel and cemento-dentinal junction.
- Describe the phenomena of cemental resorption and repair.
- Discuss the various parts and composition of alveolar bone.
- Differentiate between fenestration and dehiscence.
- Differentiate between the periosteum and endosteum.
- Discuss the process of remodeling and resorption of alveolar bone.
- Describe the blood supply, nerve supply and lymphatics of alveolar bone.

LEARNING STRATEGIES AND OUTCOMES:

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	The gingival tissue	LEC	1	✓	✓
		SGD	1		
2.	The periodontal ligament	LEC	1	✓	✓
3	The alveolar bone	LEC	1	✓	✓
4	The cementum	LEC		✓	✓
	Total		5		

COURSE NAME: PERIODONTAL STRUCTURES IN AGING HUMANS

COURSE CODE: FJ03-PER-2

Course Objectives:

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

- Describe the general age changes and those in the periodontium.
- Discuss the effects of aging on progression of periodontal diseases
- Describe effects of treatment on the aging individuals

LEARNING STRATEGIES AND OUTCOMES:

S:NO	Topic	MIT	Hrs	BCQ	OSCE
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1.	General effects of aging	LEC	1	✓	-
2.	Age changes in the periodontium	LEC		✓	-
3.	Effects of aging on the progression of periodontal diseases	LEC		✓	-
4.	Effects of treatment on the aging individuals	LEC		✓	-
	TOTAL		1		

COURSE NAME: CLASSIFICATION OF DISEASES AND CONDITIONS AFFECTING THE PERIODONTIUM

COURSE CODE: FJ03-PER-3

Course Objectives: At the end of the course the students should be able to:

- Describe the rationale to classify periodontal diseases
- Classify periodontal diseases according to the current classifications (1999 - 2017).
- Describe the characteristic features of gingival and periodontal diseases.

LEARNING STRATEGIES AND OUTCOMES:

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Classification of diseases and conditions affecting the periodontium (older classification)	LEC	1	✓	-
2.	Discuss the need for classification and current classification systems of periodontal diseases (2017)	LEC		✓	-
			1		
	TOTAL		2		

COURSE NAME: EPIDEMIOLOGY OF GINGIVAL & PERIODONTAL DISEASE

COURSE CODE: FJ03-PER-4

Course Objectives: At the end of the course the students should be able to:

5.1 Define epidemiology & classify different types of epidemiologic research

5.2 Define index & its uses.

5.3 Describe various indices used to assess periodontal problems including, gingival inflammation, gingival bleeding, periodontal destruction measurement, plaque accumulation, calculus measurement, and treatment needs assessment.

LEARNING STRATEGIES AND OUTCOMES:

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Epidemiology of Gingival & Periodontal Disease Definition, types and aims of epidemiology	LEC	1	✓	-
2.	Definition, uses and characteristics of an index Various indices used to study periodontal problems	CST	2	✓	✓
	TOTAL		3		

COURSE NAME: PATHOGENESIS**COURSE CODE: FJ03-PER-5**

Course Objectives: At the end of the course the students should be able to:

- Describe the histopathology of periodontal disease
- Describe the role of bacterial invasion, exotoxins, cellular constituents and enzymes in causing periodontal disease.
- Describe the evasion of host response in causing periodontal disease.
- List the host derived bone resorbing agents.
- Describe the role of immune response in periodontal pathogenesis

LEARNING STRATEGIES AND OUTCOMES:

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Histopathology of periodontal disease	LEC	1	✓	✓
2	Microbial virulence factors	LEC		✓	✓
3	Host derived inflammatory mediators	LEC	1	✓	✓
4	Immune response	LEC		✓	✓
	TOTAL		2		

COURSE NAME BIOFILM AND PERIODONTAL MICROBIOLOGY**COURSE CODE: FJ03-PER-6**

Course Objectives: At the end of the course the students should be able to:

- Define a biofilm.
- Discuss dental plaque, its formation and clinical significance
- List the microorganisms associated with various periodontal diseases.

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Definition of biofilm	LEC	1	✓	-
2.	Formation and significance of dental plaque	LEC		✓	✓
3	Microorganisms associated with various periodontal diseases.	LEC		✓	✓
	TOTAL		1		

COURSE NAME DEFENCE MECHANISM OF THE GINGIVA

COURSE CODE: FJ03-PER-7

Course Objectives: At the end of the course the students should be able to:

- List the various defence mechanisms of the gingiva.
- Discuss the significance of the gingival sulcus and vasculature
- Discuss the composition and clinical significance of, and the effects of drugs on crevicular fluid.
- Describe the methods of collection of sulcular fluid.
- Describe the role of leukocytes in periodontal health and disease
- Define the role and composition of saliva

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Sulcular fluid	LEC	1	✓	
2.	Leukocytes	LEC		✓	
3	Saliva	LEC		✓	
	TOTAL		1		

COURSE NAME CALCULUS AND OTHER ETIOLOGICAL FACTORS

COURSE CODE: FJ03-PER-8

Course Objectives: At the end of the course the students should be able to:

- Define calculus.
- Differentiate between supra and sub-gingival calculus
- Describe formation of calculus and theories of mineralization.
- Describe various other etiological factors contributing to gingival and
- periodontal diseases.

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Types of calculus	LEC	1	✓	
2.	Formation of calculus	LEC		✓	
3	Other etiological factors	LEC		✓	
	TOTAL		1		

COURSE NAME DENTAL BIOFILM INDUCED GINGIVITIS

COURSE CODE: FJ03-PER-9

Course Objectives: At the end of the course the students should be able to:

- Describe salient features of the initial, early, established and advanced lesions of gingivitis.
- Classify different types of gingivitis.
- Discuss the clinical features of different types of gingivitis.

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Features of stages of gingivitis	LEC	1	✓	✓
2.	Types of gingivitis	LEC	1	✓	✓
		SGD	2		
		CST	2		
3	Clinical features of types of gingivitis	LEC	1	✓	✓
		SGD	2		
		CST	2		
	TOTAL		11		

COURSE NAME ACUTE GINGIVAL INFECTIONS AND MANAGEMENT

COURSE CODE: FJ03-PER-10

Course Objectives: At the end of the course the students should be able to:

- Discuss acute necrotizing ulcerative gingivitis
- Describe acute herpetic gingivostomatitis
- Discuss pericoronitis.

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	acute necrotizing ulcerative gingivitis	LEC SGD	1 1	✓	✓
2.	acute herpetic gingivostomatitis	LEC	1	✓	✓
3	Pericoronitis.	LEC CST	1 1	✓	✓
	TOTAL		5		

COURSE NAME DESQUAMATIVE GINGIVITIS

COURSE CODE: FJ03-PER-11

Course Objectives: At the end of the course the students should be able to:

- Discuss the diagnosis of desquamative gingivitis.
- Describe the clinical features and histopathology of various forms of desquamative gingivitis.
- Describe the therapy of desquamative gingivitis.
- Describe diseases clinically presenting as desquamative gingivitis

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	diagnosis of desquamative gingivitis.	LEC	1	✓	✓
2.	clinical features and histopathology of various forms of desquamative gingivitis	LEC		✓	✓
3	therapy of desquamative gingivitis.	LEC		✓	✓
	TOTAL		1		

COURSE NAME GINGIVAL ENLARGEMENT

COURSE CODE: FJ03-PER-12

Course Objectives: At the end of the course the students should be able to:

- Classify gingival enlargement.
- Discuss the various inflammatory and non-inflammatory enlargements of gingiva and those associated with systemic diseases/conditions.
- List different neoplastic conditions of gingival enlargement.
- Describe the false enlargement of gingiva.

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Terminology and classification of gingival enlargement	LEC	2	✓	-
2.	Types of gingival enlargement	LEC		✓	✓
3	Neoplastic conditions and false enlargements	LEC		✓	✓
	TOTAL		2		

COURSE NAME PERIODONTITIS

COURSE CODE: FJ03-PER-13

Course Objectives: At the end of the course the students should be able to:

- Discuss chronic periodontitis and its diagnostic criteria.
- Compare different types of chronic periodontitis based on disease distribution and severity.
- Describe the nature of progression of chronic periodontitis.
- Describe the risk factors of chronic periodontitis.

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Diagnosis of periodontitis	LEC/ SGD	2	✓	✓
2.	Features of periodontitis	LEC		✓	✓
3	Risk factors	LEC		✓	✓
	TOTAL		2		

COURSE NAME THE PERIODONTAL POCKET

COURSE CODE: FJ03-PER-14

Course Objectives: At the end of the course the students should be able to:

- ☐ Classify different types of periodontal pockets.
- ☐ Discuss clinical features, pathogenesis, histopathology and treatment of periodontal pocket.
- ☐ Measure pocket depth in patients presenting with periodontal complaints in the dental OPD.

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Classification of periodontal pockets	LEC	1	✓	✓
2.	Clinical features, pathogenesis, histopathology and treatment of periodontal pocket.	LEC	1	✓	✓
		SGD	2		
3	Measurement of pocket depth	TYPO	1	✓	✓
		CST	10		
	TOTAL		15		

COURSE NAME PATTERNS OF BONE LOSS

COURSE CODE: FJ03-PER-15

Course Objectives: At the end of the course the students should be able to:

- Discuss the structure of alveolar bone.
- Discuss the mechanism of alveolar bone formation and destruction.
- Describe the factors determining alveolar bone morphology in periodontal disease.
- Describe bone destruction patterns in periodontal disease

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	structure of alveolar bone	LEC	1	✓	✓
2.	mechanism of alveolar bone formation and destruction	LEC		✓	✓
3.	factors determining alveolar bone morphology in periodontal disease.	LEC		✓	✓
4.	Describe bone destruction patterns in periodontal disease	LEC	1	✓	✓

	TOTAL		2		
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COURSE NAME SMOKING

COURSE CODE: FJ03-PER-16

Course Objectives: At the end of the course the students should be able to:

- Describe the effects of smoking on prevalence and severity of periodontal diseases
- Discuss the effects of smoking on etiology and pathogenesis of periodontal diseases
- Describe the effects of smoking on the response to periodontal therapy

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	effects of smoking on prevalence and severity of periodontal diseases	LEC	1	✓	
2.	effects of smoking on etiology and pathogenesis of periodontal diseases	LEC		✓	
3.	effects of smoking on the response to periodontal therapy	LEC		✓	
	TOTAL		1		

COURSE NAME INFLUENCE OF SYSTEMIC DISEASES ON PERIODONTIUM

COURSE CODE: FJ03-PER-17

Course Objectives: At the end of the course the students should be able to:

- Discuss periodontitis as a manifestation of systemic disease.
- Describe the era of focal infection.
- Discuss the association between periodontal disease and the following disorders/conditions:
 - CHD
 - atherosclerosis
 - IHD
 - thrombogenesis
 - stroke
 - diabetes mellitus;
 - pregnancy;
 - COPD;
 - acute respiratory infection.
- Discuss the effects of hematologic, metabolic and endocrine disorders on periodontium.

- Describe the effect of cardiovascular diseases on periodontium.
- Describe the effects of antibody deficiency disorders on periodontium.
- Discuss the role of periodontal medicine in clinical practice.
- Classify periodontal diseases associated with HIV infection.
- Formulate a plan of management of AIDS and HIV associated Periodontitis

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Periodontitis as a manifestation of systemic disease.	LEC	1	✓	
2.	Effects of hematologic, metabolic and endocrine disorders on periodontium.	LEC	1	✓	
3.	Effects of antibody deficiency disorders on periodontium.	LEC	1	✓	
4.	Classification of periodontal diseases associated with HIV infection.	LEC		✓	✓
5.	management of AIDS and HIV associated Periodontitis	LEC		✓	
	TOTAL		3		

COURSE NAME NECROTIZING ULCERATIVE PERIODONTITIS, REFRACTORY PERIODONTITIS

COURSE CODE: FJ03-PER-18

Course Objectives: At the end of the course the students should be able to:

Discuss the clinical features and microscopic findings of necrotizing ulcerative periodontitis

Describe the etiology of NUP

Describe the association of NUP with AIDS/HIV

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Clinical features and microscopic findings of NUP	LEC	1	✓	✓

2.	Etiology of NUP	LEC		✓	✓
5.	HIV and NUP association	LEC		✓	-
	TOTAL		1		

COURSE NAME BREATH MALODOR

COURSE CODE: FJ03-PER-19

Course Objectives: At the end of the course the students should be able to:

- Classify halitosis.
- Discuss the aetiology of halitosis.
- Diagnose halitosis based on history, clinical examination and relevant investigations.
- Manage patients presenting to the dental clinic with oral malodour.

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Classification of halitosis	LEC	1	✓	✓
2.	Etiology of halitosis	LEC		✓	✓
3.	Clinical diagnosis of halitosis	LEC	1	✓	✓
		SGD	1		
4.	Management of halitosis	LEC	1	✓	✓
		SGD	1		
	TOTAL		6		

COURSE NAME PERIODONTAL RESPONSE TO EXTERNAL FORCES

COURSE CODE: FJ03-PER-20

Course Objectives: At the end of the course the students should be able to:

- Describe the physiologic adaptive capacity of periodontium to occlusal force.
- Discuss the various types of trauma from occlusion.
- Describe the histologic changes from trauma due to occlusion.
- Describe the pathologic tooth migration phenomena

S:No	Topic	MIT	Hrs	BCQ	OSCE
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1.	Physiological adaptative capacity of periodontium	LEC	1	✓	✓
2.	Classification of trauma from occlusion	LEC		✓	✓
3.	Histological and radiographic changes in TFO	LEC		✓	✓
4.	Pathological tooth migration	LEC		✓	✓
	TOTAL		1		

COURSE NAME PERIODONTAL EXAMINATION

COURSE CODE: FJ03-PER-21

Course Objectives: At the end of the course the students should be able to:

- Plan the clinical risk assessment for periodontal disease.
- Take proper health history and dental history of the patient
- Perform clinical examination including visual examination of gingiva and assessment of biofilm and calculus
- Perform tactile periodontal examination
- Describe and perform periodontal charting
- Explain the steps of and perform examination of teeth and implants
- Prescribe appropriate radiographs and microbial tests

S:No	Topic	MIT	Hrs	BCQ	OSCE
1.	Clinical risk assessment	LEC	1	✓	✓
2	History taking	SGD CST	1 1	✓	✓
3	Extra-oral and Intra-oral examination	SGD CST	1 1	✓	✓
4	Tactile periodontal examination	SGD CST TYPO	2 2 1	✓	✓
5	Examination of teeth	SGD CST	1 1	✓	✓
6	Prescription of radiographs and microbial test	SGD SGD	2 1	✓	✓

	TOTAL		15		
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COURSE NAME: RADIOGRAPHIC AIDS

COURSE CODE: FJ03-PER-22

Course Objectives: At the end of the course the students should be able to:

- Describe the various imaging modalities for periodontal assessment
- Describe normal interdental bone in radiographs
- Discuss radiographic assessment of periodontal diseases

S:No	Topic	MIT	Hrs	BCQ	OSCE
1	Imaging modalities	LEC	1	✓	✓
		SGD	1		
		CST			
2	Normal interdental bone in radiographs	LEC	1	✓	✓
3	Radiographic assessment of periodontal diseases	LEC	1	✓	✓
		SGD	2		
		CST	2		
	TOTAL		8		

COURSE NAME DETERMINATION OF PROGNOSIS

COURSE CODE: FJ03-PER-23

Course Objectives: At the end of the course the students should be able to:

- Discuss different types of prognosis.
- Discuss the factors responsible for determination of prognosis.
- Explain the relationship between diagnosis and prognosis.

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Types of prognosis	LEC	1	✓	✓
2	Factors responsible for determination of prognosis	LEC	1	✓	✓

		CST	2		
3	Relationship between diagnosis and prognosis	LEC	1	✓	✓
	TOTAL		4		

COURSE NAME PERIODONTAL TREATMENT PLAN

COURSE CODE: FJ03-PER-24

Course Objectives: At the end of the course the students should be able to:

- Align the goals of therapy with an overall treatment plan
- Describe the sequence of therapeutic procedures.
- Describe the preferred sequence of periodontal therapy through a mind map.

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Overall treatment plan	LEC	1	✓	✓
2	Sequence if periodontal therapy	LEC	1	✓	✓
		CST	2		
		SGD	2		
	TOTAL		6		

COURSE NAME NON-SURGICAL PHASE OF PERIODONTAL THERAPY (NSPT)

COURSE CODE: FJ03-PER-25

Course Objectives: At the end of the course the students should be able to:

- Discuss the rationale of nonsurgical periodontal therapy
- Describe the sequence of NSPT
- Discuss the healing after NSPT

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Rationale of NSPT	LEC	1	✓	✓
2	Sequence of NSPT	LEC	1	✓	✓
		CST	2		
		SGD	2		

3	Healing after NSPT	LEC	1	✓	✓
	TOTAL		7		

COURSE NAME CLINICAL PRACTICE GUIDELINE FOR TREATMENT OF PERIODONTITIS

COURSE CODE: FJ03-PER-26

Course Objectives: At the end of the course the students should be able to:

Describe the steps in the management of periodontitis

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Steps in management of Periodontitis	LEC	1	✓	✓
		SGD	2		
		CST	2		
	TOTAL		5		

COURSE NAME ENDO-PERIO LESIONS

COURSE CODE: FJ03-PER-27

Course Objectives: At the end of the course the students should be able to:

- Classify pathways of communication between pulp and periodontium.
- Describe the effects of pulp disease on periodontium.
- Describe the effects of periodontitis on pulp.
- Classify endo-perio lesions.
- Describe microbiological findings, diagnosis and treatment of endo-perio lesions.

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Pulpo-periodontal communication	LEC	1	✓	✓
2	Classification of endo-perio lesions	LEC	1	✓	✓
		CST	2		
		SGD	2		
3	Diagnosis and Management of endo-perio lesions	LEC	1	✓	✓

		CST	2		
	TOTAL		9		

COURSE NAME PLAQUE BIOFILM CONTROL

COURSE CODE: FJ03-PER-28

Course Objectives: At the end of the course the students should be able to:

- Discuss the goals and rationale for plaque control.
- Describe various basic approaches for mechanical plaque control.
- Describe chemical plaque control methods.

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Goals and rationale for plaque control	LEC	1	✓	✓
2	Mechanical plaque control	LEC	1	✓	✓
		CST	2		
		SGD	2		
3	Chemical plaque control	LEC	1	✓	✓
		CST	2		
		SGD	2		
	TOTAL		11		

COURSE NAME SCALING AND ROOT INSTRUMENTATION

COURSE CODE: FJ03-PER-29

Course Objectives: At the end of the course the students should be able to:

- Describe the clinician and patient positions for various periodontal treatments.
- Discuss visibility, illumination and retraction in periodontal procedures.
- Describe the importance of instrument stabilization (instrument grasp, finger rest).
- Explain the procedure of instrument activation.
- Describe the principles of scaling and root planing.
- Describe the working of ultrasonic instruments.
- Discuss indications, precautions and contra-indications of ultrasonic instrumentation

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Operator and patient chair positioning	SGD	1	✓	✓
		CST	2		
2	Visibility, illumination and retraction	CST	1	✓	✓
		SGD	2		
3	Instrument stabilization	CST	2	✓	✓
		SGD	2		
4	Principles of scaling and root planing	SGD	2	✓	✓
		TYPO	2		
		CWS	2		
5	Principles of ultrasonic instrumentation	SGD	2	✓	✓
		TYPO	2		
		CWS	2		
6	Indications, precautions and contraindications of ultrasonic instrumentation	SGD	2	✓	✓
	TOTAL		24		

COURSE NAME SYSTEMIC ANTIBIOTICS AND LOCALLY DELIVERED ANTIMICROBIALS

COURSE CODE: FJ03-PER-30

Course Objectives: At the end of the course the students should be able to:

- Discuss the types of chemotherapy
- Discuss the systemic use of antibiotics
- Discuss locally delivered antibiotic therapy

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Types of chemotherapy	LEC	1	✓	✓
2	Systemic use of antibiotics	LEC		✓	✓
3	Locally delivered antibiotics	LEC		✓	✓

	TOTAL		1		

COURSE NAME: SURGICAL PHASE OF PERIODONTAL THERAPY

COURSE CODE: FJ03-PER-31

Course Objectives: At the end of the course the students should be able to:

- Explain the indications, contraindications and general principles for periodontal surgery.
- Describe the complications during periodontal procedures and first post-operative week.
- Describe the instruments used in periodontology

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Indications and contra-indications of periodontal surgery	LEC	1	✓	✓
2	Complications during periodontal surgery	LEC		✓	✓
3	Instruments used in surgery	LEC	1	✓	✓
		SGD	1		
	TOTAL		3		

COURSE NAME PERIODONTAL SURGICAL THERAPY

COURSE CODE: FJ03-PER-32

Course Objectives: At the end of the course the students should be able to:

- Classify gingivectomy
- Describe the prerequisites, indications, contraindications and different types of gingivectomy.
- Classify different types of flaps.
- List the indications and objectives of flap surgery.
- Define a periodontal flap.
- Discuss different types of incisions.
- Describe different flap techniques for pocket therapy.
- Describe the phases of healing after flap surgery

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Gingivectomy	LEC	1	✓	✓
		SGD	2		

2	Flap surgery techniques	LEC	1	✓	✓
		SGD	2		
3	Healing after surgery	LEC	1	✓	✓
	TOTAL		7		

COURSE NAME POCKET REDUCTION THERAPY

COURSE CODE: FJ03-PER-33

Course Objectives: At the end of the course the students should be able to:

- Discuss the rationale and different types of osseous surgery.
- List the examination prior to resective surgery.
- Discuss osseous resection techniques

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Types of osseous surgery	LEC	1	✓	✓
2	Examination for osseous surgery	LEC		✓	✓
3	Osseous resection techniques	LEC		✓	✓
	TOTAL		1		

COURSE NAME PERIODONTAL PLASTIC AND AESTHETIC SURGERY

COURSE CODE: FJ03-PER-34

Course Objectives: At the end of the course the students should be able to:

- Explain the various mucogingival problems.
- Classify gingival recession
- Describe various techniques to increase width of attached gingiva.
- Describe the classification, indications and procedures of root coverage by conventional flaps
- Describe subepithelial connective tissue graft and its modification.
- Explain the guided tissue regeneration technique for root coverage.
- Describe the procedure of frenectomy.

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Gingival recession	LEC	1	✓	✓

		SGD	1		
		CST	1		
2	Techniques to increase attached gingiva	LEC	1	✓	✓
		SGD	1		
3	Root coverage procedures	LEC	1	✓	✓
4	Frenectomy	LEC	1	✓	✓
	TOTAL		7		

COURSE NAME FURCATION INVOLVEMENT AND ITS MANAGEMENT

COURSE CODE: FJ03-PER-35

Course Objectives: At the end of the course the students should be able to:

- Classify different grades of furcation involvement.
- Discuss etiology of furcation involvement
- Discuss clinical features, prognosis and treatment of furcation involvement.

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Classification of furcation involvement	LEC	1	✓	✓
		SGD	1		
		CST	1		
2	Etiology of furcation involvement	LEC	1	✓	✓
		SGD	1		
3	Treatment of furcation involvement	LEC	1	✓	✓
	TOTAL		6		

COURSE NAME PREPARATION OF PERIODONTIUM FOR RESTORATIVE DENTISTRY

COURSE CODE: FJ03-PER-36

Course Objectives: At the end of the course the students should be able to:

- Define biological width
- Describe the consequences of encroachment of biological width
- Discuss crown lengthening

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Biological width	LEC	1	✓	✓
2	Crown lengthening	LEC	1	✓	✓
	TOTAL		2		

COURSE NAME PERI IMPLANT ANATOMY BIOLOGY AND FUNCTION

COURSE CODE: FJ03-PER-37

Course Objectives: At the end of the course the students should be able to:

- Define osseointegration
- Discuss the implant design, characteristics of implant surface and the biology of Osseo integration
- Describe the interface between implants and soft tissues
- Discuss the functional aspects of Osseo integrated dental implants

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Osseo-integration	LEC	1	✓	✓
2	Implant design and microsurface characteristics	LEC		✓	✓
3	Interface between implants and soft tissue	LEC	1	✓	✓
	TOTAL		2		

COURSE NAME CLINICAL EVALUATION OF IMPLANT PATIENT

COURSE CODE: FJ03-PER-38

Course Objectives: At the end of the course the students should be able to:

- Discuss the case types and indications
- Discuss the pre-treatment evaluation of implant patients.
- Discuss risk factors and contra-indications

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Case types and indications of implant therapy	LEC	1	✓	✓
2	Pre-treatment evaluation of the implant patient	LEC		✓	✓
3	Risk factors and contra-indications of implant therapy	LEC	1	✓	✓
	TOTAL		2		

COURSE NAME DIAGNOSTIC IMAGING FOR IMPLANT PATIENTS

COURSE CODE: FJ03-PER-39

Course Objectives: At the end of the course the students should be able to:

- Discuss the advantages and disadvantages of standard intraoral and extra oral projections and complex imaging modalities
- Interpret radiographs methodically to maximize their usefulness towards improved outcomes.

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Standard and complex imaging modalities	LEC	1	✓	✓
		SGD	1		
		CST	1		
2	Interpretation of radiographs in implant therapy	LEC	1	✓	✓
		SGD	1		
	TOTAL		5		

COURSE NAME BASIC PRINCIPLES OF IMPLANT SURGERY

COURSE CODE: FJ03-PER-40

Course Objectives: At the end of the course the students should be able to:

- Discuss the basic principles of implant surgery as per recommended guidelines.
- Discuss 2-stage implant placement
- Describe single stage implant placement

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	General principles of implant surgery	LEC	1	✓	✓

2	2-stage implant placement	LEC	1	✓	✓
3	Single stage implant placement	LEC		✓	✓
	TOTAL		2		

COURSE NAME IMPLANT RELATED COMPLICATIONS AND FAILURES

COURSE CODE: FJ03-PER-41

Course Objectives: At the end of the course the students should be able to:

- Define implant survival and success
- Discuss the types of implant failures
- Discuss the implant failure and surgical complications related to site development and variations in implant placement protocols
- Describe the various biological complications

S: No	Topic	MIT	Hrs	BCQ	OSCE
1	Implant survival and success	LEC	1	✓	✓
2	Types of implant failures	LEC		✓	✓
3	Surgical complication	LEC	1	✓	✓
4	Biological complications	LEC		✓	✓
	TOTAL		2		

STUDY GUIDE ORAL PATHOLOGY IN THE THIRD YEAR BDS

COURSE DESCRIPTION AND RATIONALE:

This course introduces the principles of human disease specifically Head and neck including etiology, pathogenesis, clinical, radiological & histological appearances. A portion of the course is devoted to basic principles of oral pathology, organization of tissues and wound healing. This course outlines developmental abnormalities, dental hard tissue pathology, inflammation and infectious disease with particular focus on HIV/AIDS related pathology, oral cancer, immune mediated disease, reactive and pigmented lesions, odontogenic cyst and tumors, bone and soft tissue pathology, salivary gland pathology as well as medical terminology.

COURSE DURATION: One year

VENUE: Department of Oral Pathology, Azam Town, Karachi, Pakistan

LEARNING OUTCOMES: The students will be able to:

1. Recognize anatomical signs of pathology and play an important role in oral health care by identifying and describing abnormal oral findings.
2. Identify normal oral structures and their variations.
3. Describe and identify common oral lesions.
4. Correlate the signs and symptoms of oral abnormalities with etiologic factors.
5. Distinguish between groups of symptoms such as reactive, neoplastic, infectious and developmental.
6. Describe the mechanisms of inflammation, neoplasia, wound healing and the influence of the immune system on these conditions.
7. Conduct clear and tactful discussion of clinical manifestations of disease with patients, dentists and other health care professionals.
8. Record case history and clinico-pathological discussions.
9. Understand the methods of slide preparation on routine stains, principles and their techniques.
10. Identify lesions under light microscope and digital microscope

MODE OF INFORMATION TRANSFER (MIT):

Lecture timings are representative of the whole class. Timings for tutorials, workshops, small group discussion (SGD), Histological Slides (HS) (microscopy), quizzes, journal club (JC), E- learning (EL) are for individual rotation groups.

ASSESSMENT TOOLS TO CHECK COMPETENCIES:

End of Departmental Rotation

- OSPE (observed and unobserved)
- BCQs

Quarterly

- Class assessment test (CAT)

Mid-term and Pre-prof:

- OSPE (observed and unobserved)
- BCQs

- Regular two-way feedback (end of rotation, mid-term and pre-prof)

ORAL PATHOLOGY COURSE OBJECTIVES

COURSE NAME: Developmental Disturbances Of Teeth

COURSE CODE: FJ03-OP-1

Course Objectives: At the end of the course, the student should be able **to:**

- 1.1. Describe the clinical and radiographic features of disturbances in number of teeth including
 - a) Anodontia
 - b) Hypodontia
 - c) Oligodontia
 - d) Hyperdontia
- 1.2. Describe the disturbances in size of teeth including:
 - a) Macrodontia
 - b) Microdontia
- 1.3. Discuss the alteration in the form of teeth includes:
 - a) Dilacerations
 - b) Taurodontism
 - c) Double teeth (fusion and germination)
 - d) Concrescence
 - e) Dens invaginatus
 - f) Dens evaginatus
 - g) Enamel pearls
 - h) Supernumerary root
- 1.4. Describe the etiology, types, clinical and radiographic features of disturbances in structure of teeth
 - I. Disturbances in structure of enamel
 - a) Environmental defects of enamel
 - b) Amelogenesis Imperfecta
 - II. Disturbances in structure of dentine
 - a) Dentinogenesis Imperfecta
 - b) Dentinal dysplasia
 - c) Regional odontodysplasia
 - III. Disturbances in structure of cementum
 - a) Hypercementosis
 - b) Hypocementosis
 - c) Cemental Aplasia
- 1.5. Associate the craniofacial anomalies and developmental syndromes with the developmental disorders of teeth
 - a) Hypohidrotic ectodermal dysplasia
 - b) Cleidocranial dysplasia
 - c) Osteogenesis Imperfecta
 - d) Apert's syndrome

- e) Crouzon syndrome
- f) Pierre robin syndrome
- g) Down's syndrome
- h) Treacher Collins syndrome

LEARNING STRATEGIES AND ASSESSMENT: Mode of information transfer (MIT)

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Disturbances in number, size & form of teeth	LEC	2	✓	✓
2.	Disturbances in structure of teeth (Enamel)	LEC	2	✓	✓
3.	Disturbances in structure of teeth (Dentine & Cementum)	LEC	1	✓	✓
4.	Craniofacial Anomalies	LEC	1	✓	✓
5.	Disturbances in number, size & form of teeth	TUTO	2		
6.	Disturbances in structure of teeth (Enamel & Dentine)	SGD	2		
7.	Disturbances in structure of teeth (Enamel & Dentine)	SGD	2		
8.	Craniofacial Anomalies	SGD	2		
	Total		14		

COURSE NAME: Dental Caries

COURSE CODE: FJ03-OP-2

Course Objectives: At the end of this course students will be able to

- 2.1 Discuss in detail the role of dental plaque, micro-organism, carbohydrates and other etiological variables in the development of dental caries.
- 2.2 Discuss Stephan's curve and mechanism
- 2.3 Classify and discuss dental caries based on:
 - a) Site of attack
 - b) Rate of attack
- 2.4 Describe the course and histopathogenesis of dental caries in:
 - a) Enamel
 - b) Dentine
 - c) Root

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Introduction to dental caries and etiology	LEC	1	✓	
2.	Classification of dental caries	EL/TUTO	2	✓	✓
3.	Histopathogenesis of dental caries	LEC	1	✓	✓

4.	Histopathogenesis of dental caries	HS	2		
	Total		6		

COURSE NAME: OTHER DISORDERS OF TEETH

COURSE CODE: FJ03-OP-3

Course Objectives: At the end of this course, students should be able to

- 3.1 Describe the disorders of eruption and shedding of teeth
- 3.2 Discuss the physiological and pathological causes of non-bacterial loss of tooth substances including:
 - a) Attrition
 - b) Abrasion
 - c) Erosion
 - d) Abfraction
- 3.3 Discuss the causes and mechanism of Internal & External Resorption
- 3.4 Discuss the causes of staining or discoloration of teeth
 - a) Intrinsic or extrinsic
 - b) Congenital or acquired

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Non-carious tooth loss	LEC	1	✓	✓
2.	Internal, External resorption	LEC	1	✓	✓
3	Discoloration of teeth	LEC	1	✓	✓
4.	Non-carious tooth loss, Internal, External resorption & Discoloration of teeth	SGD	3		
	Total		6		

COURSE NAME: DISORDERS OF DENTAL PULP

COURSE CODE: FJ03-OP-4

Course Objectives: At the end of this course students should be able to

- 4.1 Discuss etiology of pulpitis
- 4.2 Classify and differentiate between different types of pulpitis based on clinical and diagnostic features.
- 4.3 Explain the mechanism of pulpal necrosis and abscess
- 4.4 Discuss the process of pulp stones formation and pulpal sclerosis.

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Definition, etiology, classification and mechanism of pulpitis	LEC	1	✓	
2.	Classification of pulpitis and chronic hyperplastic pulpitis	LEC	1	✓	✓
3.	Complete overview of pulpitis	SGD	4		
	Total		6		

COURSE NAME: PERIAPICAL PERIODONTITIS AND ROUTES OF SPREADS OF INFECTIONS

COURSE CODE: FJ03-OP-5

Course Objectives: At the end of this course students will be able to

4.1 Explain the spread of infection and describe the pathogenesis, clinical and diagnostic features of:

- Acute and chronic periapical periodontitis
- Periapical abscess
- Periapical granuloma
- Cellulitis and Ludwig's angina

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Acute and chronic periapical periodontitis	LEC	1	✓	✓
2.	Routes of spread of infection	LEC	1	✓	✓
3.	Cellulitis and Ludwig's angina	LEC	1	✓	✓
4.	Odontogenic infections	HS	1		
5.	Cellulitis and Ludwig's angina	SGD	4		
	Total		8		

COURSE NAME: CYSTS OF THE JAWS

COURSE CODE: FJ03-OP-6

Course Objectives: At the end of this course students will be able to

6.1 Classify and discuss the origin of odontogenic and non-odontogenic cyst of the jaws.

6.2 Compare the clinical, radiographic and histological features of odontogenic cyst including:

- Periapical (radicular) cyst
- Dentigerous cyst
- Eruption cyst
- Odontogenic keratocyst
- Gingival cyst
- Lateral periodontal cyst
- Calcifying odontogenic cyst
- Glandular odontogenic cyst

6.3 Discuss the pathogenesis of each of the cysts

6.4 Describe clinical, radiographic and histological features of non-odontogenic cysts including:

- a) Nasopalatine cyst
- b) Nasolabial cyst
- c) Median cyst
- d) Globulo-maxillary cyst

6.5 Describe clinical, radiographic and histological features of non-epithelial/pseudocyst including:

- a) Traumatic bone cyst
- b) Stafne's bone cavity
- c) Aneurismal bone cyst

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Classify and origin of odontogenic and non-odontogenic cyst of the jaws	LEC	1	✓	
2.	Clinical, radiographic and histological features of Radicular cyst	LEC	1	✓	✓
3.	Clinical, radiographic and histological features of OKC, Dentigerous & Eruption cyst	LEC	1	✓	✓
4.	Clinical, radiographic and histological features of non-odontogenic cysts	LEC	1	✓	✓
5.	Clinical, radiographic and histological features of non-epithelial/pseudocyst	LEC	2	✓	
6.	Odontogenic cysts of the jaws	HS	3		
7.	Odontogenic and non-Odontogenic Cysts of the Jaws	SGD	8		
	Total		17		

COURSE NAME: DISEASES OF PERIODONTIUM

COURSE CODE: FJ03-OP-7

Course Objectives: At the end of this course students will be able to

7.1 Define the periodontium and its components (gingiva, periodontal ligament, cementum, and alveolar bone).

7.2 Classify periodontal diseases

- 7.3 Differentiate between gingivitis and periodontitis in terms of etiology, pathogenesis, clinical features, and progression.
- 7.4 Explain the pathogenesis of periodontal disease
- 7.5 Describe clinical features and interpret radiographic of common periodontal diseases such as:
- Chronic periodontitis
 - Aggressive periodontitis
 - Necrotizing periodontal diseases
- 7.6 Discuss the histopathological features of major periodontal diseases

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Define the periodontium and describe its components. Classify periodontal diseases	LEC	2	✓	
2.	Differentiate between gingivitis and periodontitis in terms of etiology, pathogenesis, clinical features, and progression. Explain the pathogenesis of periodontal disease	LEC	2	✓	
4.	Identify and describe clinical features, Interpret radiographic and clinical findings of common periodontal diseases such as: d) Chronic periodontitis e) Aggressive periodontitis Necrotizing periodontal diseases	LEC	2	✓	
5.	Classification of Periodontal Diseases and Clinical features	SGD	4	✓	✓
6.	Discuss the histopathological features of major periodontal diseases	HS	2		
	Total		12		

COURSE NAME: HYPERPLASTIC, NEOPLASTIC AND OTHER DISORDERS OF ORAL MUCOSA

COURSE CODE: FJ03-OP-8

Course Objectives: At the end of this course students will be able to

- 8.1 Describe the etiology, pathogenesis and diagnostic features of following reactive hyperplastic lesions of oral mucosa:
- Epulis (Fibrous, Vascular & Peripheral giant cell)
 - Generalized gingival hyperplasia
 - Denture induced fibrous hyperplasia
 - Inflammatory papillary hyperplasia
- 8.2 Describe reactive neuronal lesions including traumatic neuroma
- 8.3 Describe benign vascular tumors (hemangioma & lymphangioma)

8.4 Discuss the pathogenesis and diagnostic features of connective tissue and allied tumors

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Reactive hyperplastic lesions of oral mucosa	LEC	1	✓	✓
2.	Benign vascular tumors (hemangioma & lymphangioma)	LEC	1	✓	✓
3.	Connective tissue and allied tumors	LEC	1	✓	
4.	Reactive hyperplastic lesions of oral mucosa & hemangioma	SGD/HS	4		
	Total		7		

COURSE NAME: KERATOSIS AND RELATED DISORDERS OF ORAL MUCOSA

COURSE CODE: FJ03-OP-9

Course Objectives: At the end of this course students should be able to

- 9.1 Classify white lesion of oral mucosa according to their etiology
- 9.2 Describe hereditary white lesions
 - a) Oral epithelial nevus
 - b) Leukoedema
 - c) Hereditary benign intraepithelial dyskeratosis
 - d) Follicular keratosis
- 9.3 Describe etiology, pathogenesis, clinical feature, histopathology and prognosis of preneoplastic, neoplastic and other lesions.
 - a) Leukoplakia
 - b) Erythroplakia
 - c) Oral submucous fibrosis
 - d) Lichen planus
 - e) Lupus erythromatosus
 - f) Actinic cheilitis

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Classify white lesion of oral mucosa and hereditary white lesions	LEC	1	✓	
2.	Precancerous lesions (Leukoplakia & Erythroplakia)	LEC	1	✓	✓
3.	Precancerous conditions (Lichen planus, Lupus erythromatosus and others)	LEC	2	✓	✓

4.	Precancerous conditions (OSF)	LEC	2	✓	✓
5.	Preneoplastic lesions and conditions	SGD	4		
	Total		10		

COURSE NAME: ORAL Epithelial Tumors, Melanocytic Naevi And Malignant Melanoma

COURSE CODE: FJ03-OP-10

Course Objectives:

- 10.1 Describe the etiology, pathogenesis and diagnostic features of the following reactive/infectious lesions:
 - a) Squamous cell papilloma
 - b) Condyloma acuminatum
 - c) Verruca vulgaris
 - d) Focal epithelial hyperplasia
- 10.2 Explain the etiology, pathogenesis, clinical features, histopathology and prognosis of squamous cell carcinoma
- 10.3 Describe staging and grading of squamous cell carcinoma
- 10.4 Explain the etiology, pathogenesis, clinical feature, histopathology of Basal cell carcinoma
- 10.5 Explain the etiology, pathogenesis, clinical features, histopathology of melanotic naevi and malignant melanoma.

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Reactive/infectious lesions of Oral Mucosa	LEC	1	✓	✓
2.	Oral squamous cell carcinoma (OSCC)	LEC	2	✓	✓
3.	Basal cell carcinoma, melanotic naevi and malignant melanoma.	LEC	2	✓	
4.	Oral squamous cell carcinoma (OSCC)	HS	3		
5	Reactive/infectious lesions of Oral Mucosa Oral squamous cell carcinoma (OSCC) Basal cell carcinoma, melanotic naevi and malignant melanoma. Oral squamous cell carcinoma (OSCC)	SGD	4		
	Total		12		

COURSE NAME: INFECTIONS OF THE ORAL MUCOSA

COURSE CODE: FJ03-OP-11

Course Objectives:

11.1 Discuss clinical, pathogenesis and histopathology of bacterial infections

- a) ANUG
- b) NOMA
- c) Actinomycosis
- d) Syphilis
- e) Tuberculosis
- f) Leprosy
- g) Gonorrhea

11.2 Discuss clinical, pathogenesis and histopathology of viral infections.

- a) Herpes simplex infection
- b) Varicella zoster infection
- c) Infectious mononucleosis
- d) Hand, foot and mouth disease
- e) Herpangina
- f) Measles
- g) Cytomegalovirus

11.3 Discuss clinical, pathogenesis and histopathology of fungal infections

Candida species and opportunistic infections

11.4 Discuss clinical, pathogenesis and oral manifestations of HIV and AIDS infections

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Viral infections	LEC	2	✓	✓
2.	Bacterial infections	LEC	2	✓	✓
3.	Fungal infections	LEC	2	✓	✓
4.	Viral, Bacterial and fungal infections	SGD	6		
5.	Viral, Bacterial and fungal infections	HS	3		
	Total		15		

COURSE NAME: Vesiculobullous Lesions

COURSE CODE: FJ03-OP-12

COURSE OBJECTIVES:

12.1 Discuss the histopathological features of following vesiculobullous conditions:

- a) Pemphigus vulgaris
- b) Mucous membrane pemphigoid
- c) Bullous pemphigoid
- d) Epidermolysis bullosa
- e) Erythema multiforme

12.2 Discuss the histopathological features of the following ulcerative conditions:

- a) Immunological diseases

- b) Aphthous ulcers
- c) Bechets syndrome

LEARNING STRATEGIESAND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Ulcerative conditions	LEC	2	✓	
2.	Vesiculobullous Lesions (Mucous Membrane Pemphigoid)	LEC	1	✓	✓
3.	Vesiculobullous Lesions (Pemphigus Vulgaris)	LEC	1	✓	✓
4	Vesiculobullous Lesions (Erythema Multiforme)	LEC	1	✓	✓
5	Vesiculobullous Lesions (Others)	LEC	2	✓	✓
6..	Vesiculobullous conditions	HS	3		
7	Vesiculobullous conditions	SGD	5		
	Total		15		

COURSE NAME: Odontogenic Tumors

COURSE CODE: FJ03-OP-13

Course Objectives: At the end of the course , students will be able to

13.1 Classify odontogenic tumors

13.2 Describe etiology, pathogenesis, clinical and diagnostic features of tumors of odontogenic epithelium.

- a) Ameloblastoma
- b) Squamous odontogenic tumor
- c) Calcifying epithelial odontogenic tumor
- d) Adenomatoid odontogenic tumor

13.3 Describe etiology, pathogenesis, clinical and diagnostic features of mixed odontogenic tumors

- a) Ameloblastic fibroma
- b) Ameloblastic fibro-odontome
- c) Odontoma

13.4 Discuss the behavior of benign mesenchymal odontogenic tumors:

- a) Odontogenic fibroma
- b) Odontogenic myxoma
- c) Cementoblastoma

LEARNING STRATEGIESAND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
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1.	Tumors of odontogenic epithelium and its Classification	LEC	2	✓	✓
2	Odontomes	LEC	2	✓	✓
3.	Mixed odontogenic tumors	LEC	2	✓	
4.	Benign mesenchymal odontogenic tumors	LEC	2	✓	✓
5.	Ameloblastoma	HS	2		
6	Odontogenic and Non Odontogenic Tumors	SGD	6		
	Total		16		

COURSE NAME: Salivary Gland Diseases

COURSE CODE: FJ03-OP-14

Course Objectives: At the end of this course students will be able to

14.1 Describe reactive lesions of salivary gland

- a) Mucous extravasation phenomenon
- b) Mucous retention cyst
- c) Necrotizing metaplasia

14.2 Describe pathogenesis, clinical and diagnostic features of the infections of the salivary glands:

Mumps

- a) Bacterial sialadenitis
- b) Viral sialadenitis
- c) Sarcoidosis
- d) Sjogren's syndrome
- e) Xerostomia

14.3 Classify and describe pathogenesis, clinical and diagnostic features of salivary gland tumors:

- a) Pleomorphic adenoma
- b) Warthin's tumor
- c) Basal cell adenoma
- d) Oncocytoma
- e) Canalicular adenoma
- f) Mucoepidermoid carcinoma
- g) Acinic cell carcinoma
- h) Adenoid cystic carcinoma

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Reactive lesions of salivary gland	LEC	2	✓	
2.	Infections of the salivary glands	LEC	2	✓	✓
3.	Sjogren's syndrome	LEC	1	✓	✓
4.	Salivary gland tumors	LEC	4	✓	✓
5.	Infections and Tumors of the salivary glands	SGD	5		
6.	Salivary gland tumors	HS	2		
	Total		16		

COURSE NAME: METABOLIC AND GENETIC DISEASES OF BONE

COURSE CODE: FJ03-OP-15

COURSE OBJECTIVES: At the end of this course students will be able to

15.1 Discuss the following genetic abnormalities and associated developmental disorders with dental defects

- Osteogenesis Imperfecta
- Osteopetrosis
- Cleidocranial dysplasia
- Cherubism

15.2 Classify and describe etiology, clinical features, pathogenesis and behavior of fibro-osseous lesions.

15.3 Discuss the pathogenesis and diagnostic features of the following metabolic conditions:

- Paget's disease
- Hyperparathyroidism
- Hypo/hyperthyroidism
- Osteoporosis
- Acromegaly

15.4 Describe clinical and diagnostic features of central giant cell granuloma.

15.5 Classify bone tumors

15.6 Describe etiology, clinical features, pathogenesis and diagnostic features of bone tumors including:

- Osteoma and osteoblastoma
- Osteosarcoma
- Ossifying fibroma

LEARNING STRATEGIES: Flipped classroom (FC)

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Genetic abnormalities of bone	LEC	2	✓	✓

2.	Fibro-osseous lesions	LEC	2	✓	✓
3.	Metabolic conditions & Central giant cell granuloma	LEC	2	✓	✓
4.	Bone tumors	LEC	2	✓	✓
5.	Genetic and metabolic abnormalities of bone	SGD	6		
	Total		14		

COURSE NAME: Temporomandibular Joint Disorder

COURSE CODE: FJ03-OP-16

Course Objectives: At the end of this course students will be able to

16.1 Discuss the developmental disorders of TMJ:

- a) Aplasia
- b) Hyperplasia
- c) Hypoplasia of mandibular condyle

16.2 Discuss the inflammatory disorders of TMJ:

- a) Traumatic arthritis
- b) Infective arthritis
- c) Rheumatoid arthritis

16.3 Discuss causes and clinical features of osteoarthritis

16.4 Discuss causes and clinical features of Myofascial pain dysfunction syndrome and disc displacement.

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
1.	Temporomandibular joint disorder	LEC	1	✓	✓
2	Temporomandibular joint disorder	SGD	2		
	Total		3		

COURSE NAME: Pigmented Lesions

COURSE CODE: FJ03-OP-17

Course Objectives: At the end of this course students will be able to

17.1 Describe etiology, pathogenesis, clinical and diagnostic features of exogenous and endogenous oral pigmented lesions.

LEARNING STRATEGIES AND ASSESSMENT:

S:NO	TOPIC	MIT	HRS	BCQ	OSPE
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1.	Oral pigmented lesions	LEC	1	✓	✓
2	Oral pigmented lesions	SGD	2		
	Total		3		
