

**IRAQI BOARD FOR MEDICAL SPECIALIZATIONS  
FAMILY AND COMMUNITY MEDICINE  
SCIENTIFIC COUNCIL**



**FAMILY  
MEDICINE  
SCIENTIFIC  
CURRICULUM**



**The Academic Curriculum  
for the Board Study (Fellow-  
Degree) in Family Medicine  
Specialty “FIBMC/FM”**



**2024-2025**

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**Four Year Residency  
Training Programme**



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# ACADEMIC CURRICULUM FOR FAMILY MEDICINE JOINT PROGRAM 2024-2025

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**Prepared and Supervised by:**

**Professor Yousif AbdulRaheem**

**Chairperson of the Scientific Council for Family and  
Community Medicine Specialty  
Iraqi Board for Medical Specializations**



**Reviewed by:**  
**The Supervising Scientific Committee on Family  
Medicine Specialty Study**

**1- Professor Lujain Anwar Abood Al- Khazrajy**  
Al- Kindy College of Medicine - University of Baghdad



**2- Professor Ali Abdulridha Kadhim Abutiheen**  
College of Medicine- University of Kerbala



**3- Consultant Ban Abdul-Ridha Salman AL-Hashimi**  
MoH/Al-Dubbat PHCC for Family Medicine



**4- Assist Professor Eman Adnan Falah Alkaseer**  
College of Medicine - University of Baghdad



**5- Consultant Lamyaa Ali Hasan**  
Retired /MoH



**6- Assist Professor Anmar Borhan AL-Dewachi**  
College of Medicine - University of Mosul



**7- Consultant Kefah Hamid Abid Almajeed Alani**  
Retired /MoH



**8- Consultant Hanadi Muhammad Abdul-Sahib**  
Baghdad-Karkh Directorate/MoH



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# Academic Curriculum for Family Medicine Joint Program

- **Introduction:**

*“Where the art of Medicine is Loved, There is Also Love for  
Humanity”*



Family medicine, also known as primary care or general practice, is a medical specialty that focuses on providing comprehensive and continuous healthcare to individuals and families. It encompasses the study and practice of promoting overall well-being, preventing diseases, and managing acute and chronic conditions within the context of family and community settings to address the diverse health needs of individuals across the lifespan, from infancy to old age.

The field of family medicine takes a patient- (or person) centered approach, considering the physical, emotional, and social aspects of health. The primary focus of a family medicine specialist is to promote health and well-being, prioritizing the comprehensive care of individuals and families within primary healthcare settings. It recognizes the importance of building long-term relationships with patients/clients and their families, providing personalized care that extends beyond individual medical concerns.

The study of family medicine plays a crucial role in the training of healthcare professionals, preparing them to deliver primary care services and manage a wide range of health conditions in diverse community settings. It involves a comprehensive curriculum that equips physicians with the knowledge, skills, and competencies needed to provide comprehensive, continuous, and coordinated care to individuals and families. By emphasizing preventive care and health promotion, family medicine contributes to improving the overall well-being and quality of life for populations.

- **Vision:**

The program reflects a vision of the family medicine specialist as a practitioner who possesses excellent competencies to effectively manage a majority of prevalent health concerns within primary healthcare settings in Iraq.

- **Goal:**

The goal of the study is to ensure that primary healthcare settings receive strong support from specialized professionals in family medicine who possess the latest knowledge in the field, are equipped with the necessary skills and ethical principles, and are committed to upholding high social standards and moral values. This will enable them to provide comprehensive care in primary healthcare settings and contribute to universal health coverage, which is a key goal in sustainable development.

- **Learning Objectives**

At the end of the program it is expected to have a physician specialist in family medicine that can fulfill the following job description criteria to:

- 1) Demonstrates the value of providing continuous and comprehensive care to both the patients/clients and their families.
- 2) Develops effective communication skills and builds relationships with patients and their families, addressing their physical, social, and psychological needs, while meeting their expectations.
- 3) Recognizes the common health problems of society and has the ability to prioritize them.
- 4) Demonstrates clinical competence in the diagnosis and management of acute & chronic problems commonly seen in primary care, using a holistic approach that recognizes the biopsychosocial domains of these problems.
- 5) Takes required therapeutic and preventive actions to protect the life of individuals, families and a designated population group.
- 6) Elevates the standard of health care to family and to community.
- 7) Demonstrate skills of self-directed learning, critical thinking and evidence-based practice.
- 8) Participates with community medicine as well as other specialties physician to promotes the health team work and ensure community participations in the planning, implementation and evaluation of health programs.
- 9) Conduct health researches particularly community based studies.
- 10) Participate in training of health care personals.

- **Study Period:**

It encompasses a four-year curriculum (each year has three courses, course is 4 month) designed to equip physicians with the knowledge, skills, and competencies necessary to understand and address the health needs of individual, family & community. This period is classified into:

**I- Year I:**

- Course 1: Introduction to Family, Community and Population Health
  - Course 2: Internal Medicine: Cardiology, Respiratory, GIT, Nephrology and Endocrinology)
  - Course 3: Internal Medicine: Neurology (4 Weeks), Rheumatology (4 Weeks), Hematology (4 Weeks) + Laboratory Work (4 Weeks)
- (\*The total duration of the Internal Medicine training, including Course 2 and Course 3, is 7 Months.)

**II- Year II:**

- Course 1: Gynecology, including Breast health, and Infertility
  - Course 2: Obstetrics (3 Months) + Pediatrics; Neonatology (1 Month).
  - Course 3: Pediatrics
- (\* Total Women Health, Gynecology & Obstetric training is 7 Month, Total pediatric training is 5 Months)

**III- Year III:**

- Course 1: General Surgery (1 Month) + Urology (1 Month) + Orthopedics (1 Month), and Accidents & Emergency (1 Months)
- Course 2: Psychiatry (2 Months) + Dermatology (2 Months).
- Course 3: ENT (2 Months) + Ophthalmology (2 Months).

**IV- Year IV:**

- Course 1: Geriatric Medicine (1 Month) + Nutrition (1 Month) + Imaging (XR + CT Scan + US + MRI) (2 Months)
- Course 2: Family Medicine Training Center (Job Shadowing).
- Course 3: Family Medicine Training Center (Job Shadowing).

**Four-Year Family Medicine Study Curriculum Map**

Year	Course (4 Months)											
	1				2				3			
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>I</b>	Family, Community and Population Health (College of Medicine)				Internal Medicine (CVS + Respiratory + GIT + Nephrology + Endocrinology)				Internal Medicine (Neurology + Rheumatology + Hematology) + Lab Work			
<b>II</b>	Gynecology +Breast Health + Infertility				Obstetrics + Pediatrics (Neonatology)				Pediatrics			
<b>III</b>	General Surgery + Urology + Orthopedics + Accidents & Emergency				Psychiatry + Dermatology				ENT + Ophthalmology			
<b>IV</b>	Geriatric Medicine + Nutrition + Imaging (XR + CT Scan + US + MRI)				Family Medicine Training Center (Job Shadowing)				Family Medicine Training Center (Job Shadowing)			

• **Topics of Study:**

<b>Year I</b>
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**A- Course 1: Basic Academic Course (Family, Community and Population Health.**

**Learning Settings:** Family & Community Medicine Department in Medical College.

**1) Introduction to Family Medicine**

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

- ☞ Understand the historical development of Family Medicine, including key milestones and influential figures who shaped the field.
- ☞ Define the concepts of disease prevention and control, and differentiate between the various levels of prevention.
- ☞ Identify the essential criteria, roles, and responsibilities that define a competent family physician, including skills and competencies required for effective practice and communications.
- ☞ Explain the principles of patient/client-centered medical care, emphasizing the importance of comprehensive healthcare in addressing the needs of patients holistically.

Required Topics:

- ☞ History, Evolution, and Pioneers of Family Medicine
- ☞ Concepts of Health and Disease (Theories, determinants, & Natural history of disease)
- ☞ Concepts of Prevention and Control (Definition & Levels)
- ☞ Criteria of Family physician
- ☞ Patient/client -Centered Medical care & Comprehensive healthcare.
- ☞ Patient Counselling & Communication skills.

**2) Principles and Practice of Epidemiology**

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

- ☞ Apply general principles of Epidemiology relevant to Family Medicine.
- ☞ Properly calculate, interpret, and use measures of disease, injuries, and death in human populations.



Required Topics:

- ✓ Commonly Used Definitions and Terms
- ✓ Descriptive and Analytic Triad & Epidemiology
- ✓ Measurement of Morbidity Indicators
- ✓ Measurement of Disability Indicators
- ✓ Measurement of Mortality Indicators
- ✓ Screening for Disease (Principles, Types, & Biases)
- ✓ Epidemiological Studies (Methods: Descriptive & Analytic Studies)
- ✓ Measures of association and Effect (OR, RR, AR, AR%).
- ✓ Causal Inferences: Bias, Confounding, and Interaction.

**3) Principles of Biostatistics & Public Health Informatics**

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

- ☞ Apply general principles of Biostatistics relevant to Family Medicine.
- ☞ Apply descriptive and inferential statistical methodologies for testing specific community or research hypotheses according to the type of study design and measurement scale.

Required Topics:

- ✓ Principles and Applications of Biostatistics (Descriptive Vs Inferential)
- ✓ Variability & Variables (Definition, Measuring Scales)
- ✓ Population, Sample & Sampling Variation (Parameters vs Statistics)
- ✓ Tabulation & Diagrammatic Presentation
- ✓ Measures of Location & Dispersion
- ✓ Probability and Probability Distribution
- ✓ Normal and Skewed Distributions
- ✓ Hypothesis testing (z test, t test, X<sup>2</sup> test, ANOVA test)
- ✓ Estimation of Confidence Interval

**4) Evidence-Based Medicine (EBM) in Practice**

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

- ☞ Demonstrate the ability to integrate evidence-based approaches into clinical decision-making
- ☞ Create a clear and focused research questions using the PICO (Population, Intervention, Comparison, Outcome) framework.
- ☞ Demonstrate the ability to write and critique scientific papers following established guidelines.

Required Topics:

- ✓ Applying EBM in clinical practice
- ✓ Formulate Research Question Using PICO
- ✓ Statistical and Clinical Significance
- ✓ Interpreting measures of association: Number need to treat (NNT), Number need to prevent (NNP), Number need to harm (NNH).
- ✓ Writing scientific paper
- ✓ Critical Appraisal

**5) Clinical Decision Making & Professional Ethics**

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

- ☞ Demonstrate proficiency in incorporating clinical examination and test results into clinical decision-making processes.
- ☞ Identify appropriate management action based on examination outcomes, considering patient preferences and clinical context.

Required Topics:

- ✓ Interpretation of Diagnosis & Screening tests.
- ✓ Interpretation of test value.
- ✓ Team Based Healthcare
- ✓ Medical Ethics (Patient's rights, Duty of care, Ethical issues related to doctor-patient relationship, Analysis of ethical dilemma).

**6) Epidemiology of Communicable Diseases (CDs): Common communicable diseases in Iraq and Related National Health Programs**

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

- ☞ Describe the fundamental concepts of epidemiology, including modes of transmission and risk factors for common communicable diseases in Iraq.
- ☞ Explain the principles of disease surveillance and outbreak investigation relevant to public health in Iraq.
- ☞ Identify effective methods of control and prevention for common communicable diseases in the Iraqi context.

Required Topics:

- ✓ Introduction to Communicable Diseases (terms and principles)
- ✓ Diseases Controlled Primarily by Vaccination: Measles, Mumps, Rubella, Pertussis, Tetanus, Diphtheria, Influenza, Hemophilus Influenzae Infections, Varicella And Herpes Zoster, Poliomyelitis (including Eradication program), Pneumococcal Infections.

- ✓ Infections Spread by Close Personal Contact: Viral Hepatitis, Tuberculosis, Leprosy, Aseptic Meningitis & Meningococcal Disease, Epstein - Barr virus And Infectious Mononucleosis, Herpes Simplex Virus & Cytomegalovirus Infections, Group A Streptococcal Diseases.
- ✓ Diseases Spread by Food and Water: Rotavirus diarrhea, Escherichia Coli & other acute bacterial gastroenteritis, Typhoid Fever & Salmonellosis, Shigellosis, Cholera, Amebiasis, Giardiasis.
- ✓ Sexually Transmitted Diseases: Human Immunodeficiency Virus (HIV) Infection and, Acquired Immunodeficiency Syndrome (AIDS), Human Papillomavirus (HPV), Chlamydia, Syphilis, Gonorrhea, Trichomoniasis.
- ✓ Diseases Transmitted Primarily by Arthropod Vectors: Viral Hemorrhagic Fevers, Rickettsial Infections, Leishmaniasis, Malaria, Plague, Trypanosomiasis, Lymphatic Filariasis.
- ✓ Diseases Transmitted Primarily from Animals to Humans (Zoonoses): Rabies, Anthrax, Brucellosis, Toxoplasmosis, Hemorrhagic fever.
- ✓ Other Infection-Related Diseases of Public Health Import: Head and pubic lice, Hookworm Disease, Intestinal Nematodes, Schistosomiasis, Hydatid disease, Scabies, Nosocomial Infections
- ✓ Emerging and Reemerging of Communicable diseases.
- ✓ Nosocomial infection prevention and control

7) Epidemiology of Non-communicable Diseases (NCDs): Common non-communicable diseases in Iraq and Related National Health Programs.

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

- ☞ Describe the fundamental concepts of epidemiology such as risk factors, complications, and principles related to disease surveillance in the context of non-communicable diseases in Iraq.
- ☞ Identify and analyze risk factors for common non-communicable diseases in Iraq, focusing on their impact on population health.
- ☞ Outline the strategies and methods used for the prevention and control of non-communicable diseases, emphasizing public health interventions and disease surveillance systems in Iraq.
- ☞ Assess the impact and outcomes of existing national health programs targeting the prevention and management of NC diseases

Required Topics:

- ✓ Introduction to and prevention of Non-communicable Diseases
- ✓ Hypertension, Ischemic Heart Disease , Rheumatic Heart Disease (& Congenital Heart Diseases)
- ✓ Asthma & other Respiratory Disease, Stroke
- ✓ Obesity, Diabetes Mellitus
- ✓ Cancer
- ✓ Renal and Urinary Tract Disease
- ✓ Neurological and psychological disorders

8) Primary Healthcare services, including Nutrition and Related National Health Programs

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

- ☞ Describe the essential concepts of primary healthcare services within the health system, including accessibility, comprehensiveness, and continuity of care.
- ☞ Identify the advantages of primary healthcare services, such as improved population health outcomes, cost-effectiveness, and early disease detection and prevention.
- ☞ Outline the key contents and programs of primary healthcare, including maternal and child health, immunization, health education, and chronic disease management.
- ☞ Discuss the methods of delivery for primary healthcare services, such as community-based care, family practice, and integration with other levels of the health system.

Required Topics:

- ✓ Maternal and Child Health including Family Planning
- ✓ Adolescent health
- ✓ Geriatric Health
- ✓ Nutrition and Health
- ✓ Mental Health.
- ✓ Genetics and Health
- ✓ School health services
- ✓ Health Promotion, Health Education, and Disease Prevention
- ✓ Safe Drug Prescription, Polypharmacy and Drug Abuse.
- ✓ Herbal Medicine
- ✓ National PHC Programs and indicators (MCH, EPI, IMCI..etc).
- ✓ Electronic Health Records & Information Technology

## 9) Environment, Occupational, & Social Health including Behavioral life

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

- ☞ Describe current environmental, occupational, social, and behavioral risks factors, and their influence on human health and safety.
- ☞ Explain assessment methods for the health impacts of different environmental, occupational, and social hazards, including risk assessment models and exposure measurement techniques.
- ☞ Analyze the short-term and long-term health effects of different environmental and social risks, such as air and water pollution, chemical exposure, occupational hazards, and social determinants of health.
- ☞ Describe strategies and interventions for assessing, preventing, and controlling environmental, occupational, and social risks to human health, emphasizing public health policies, regulatory frameworks, and community-based interventions.
- ☞ Highlight the role of public health policies, regulatory frameworks, and community-based interventions in preventing and controlling risks to health and safety.

Required Topics:

- ✓ Principles of Sociology in Health Care
- ✓ Social determinants of health
- ✓ Safe occupational Health & environment
- ✓ Demography Family & culture
- ✓ Child labor & Juvenile Delinquency
- ✓ Violence
- ✓ Smoking, Alcohol, and substance addicts
- ✓ Accident, injuries, and Sickness Absenteeism
- ✓ Vulnerable and disabled workers
- ✓ Physical, Chemical, & Biological hazards & Common occupational diseases
- ✓ Prevention and Control of Occupational Hazards, Ergonomics
- ✓ Water Quality & Pollution, Food safety & Security, Air Pollution
- ✓ Sanitation, Housing and Health, including Control of Insects and Rodents, Waste Disposal, including Biological Waste and Waste Recycling
- ✓ Environmental Health Risk Assessment and Programs
- ✓ International Health & Global Environment

## 10) Health Management & Economics

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

- ☞ Develop strategies for healthcare program planning and activities that address population health needs and resource allocation.
- ☞ Demonstrate skills in evaluating healthcare programs to assess the effectiveness, efficiency, and outcomes of healthcare programs, using data-driven approaches for continuous improvement.
- ☞ Cultivate leadership skills to effectively manage healthcare teams, coordinate activities, and ensure the successful delivery of healthcare services.
- ☞ Apply evidence-based strategies aimed at improving the quality, accessibility, and effectiveness of healthcare services to meet patient and community needs.

Required Topics:

- ✓ Planning & Evaluation in of Health Services / Programs
- ✓ Leadership & Setting Priorities
- ✓ Disaster Management
- ✓ Health Care Delivery
- ✓ International Health and Voluntary Health Agencies
- ✓ Introduction to Health Economics
- ✓ Financial Analysis & Control in Health Settings
- ✓ Quality management & Human Resources Development

### **B- Course 2: Common Medical Conditions in Family Medicine Practice.**

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient Clinic
- ☞ Consultant Clinic
- ☞ Inpatient Medical Ward
- ❖ The resident should attend all educational activities: Meeting Grand Tour, Morning Report. Death Conference, Journal Club, CME Activities

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

- ☞ Knowledge: Identify and describe the diagnosis, management, and treatment options for common medical conditions encountered in family medicine practice.

- ☞ Practice: Apply clinical skills and evidence-based practices to assess, diagnose, and manage common medical conditions in family medicine, focusing on patient-centered care and continuity of care.
- ☞ Attitude: Develop a compassionate and holistic approach to patient care by fostering effective communication, cultural sensitivity, and ethical decision-making when managing common medical conditions in a family medicine setting.
- ☞ Multidisciplinary Collaboration: Learn to work as part of a multidisciplinary team, collaborating with specialists, nurses, and allied health professionals to provide holistic patient care.
- ☞ Continuity of Care: Understand the importance of continuity of care, including transitioning patients from inpatient to outpatient settings and coordinating follow-up care.
- ☞ Perform appropriate & timely referrals of serious medical conditions
- ☞ Acquire skills In Basic Medical Procedures:
  - Venipuncture (blood draws) & Intravenous (IV) cannulation
  - Chest x-ray interpretation
  - ECG (electrocardiogram) interpretation
  - Arterial blood gas (ABG) sampling and Interpretation
  - Paracentesis and thoracentesis (with supervision)
  - Spirometry and Serial Peak Flow measurement.
  - Inhaler technique

Required Topics:

- ✓ Cardiovascular System:  
Hypertension, Ischemic Heart Disease (Acute Coronary Syndromes, Angina Pectoris, Myocardial infarction), Murmurs and Valvular Heart Disease, Heart Failure, Dysrhythmia, Peripheral Arterial Disease, DVT and Pulmonary Thromboembolism.
- ✓ Respiratory System;  
Acute Bronchitis and Pneumonia, Asthma, Chronic Obstructive Pulmonary Disease, Tuberculosis, Lung Cancer
- ✓ GIT System:  
Esophageal Disorders, Peptic Ulcer Disease and Gastritis, Gastroesophageal Reflux Disease, Gastroenteritis, Viral Hepatitis (A, B, C, D, E), Hepatitis (other than common viral) and Cirrhosis, Common Water & Food Born Diseases: Typhoid fever, Shigella, Cholera, Amebic Dysentery, Nematodes, IBS, Malabsorption Syndromes, Diverticular Disease, Inflammatory Bowel Disease

- ✓ Urinary System:
  - Cystitis and Bacteriuria, Pyelonephritis, Epididymitis and Prostatitis, Urinary Incontinence, Renal failure, Scrotal Pain, Masses, and swelling, genital lesions, Urolithiasis, Benign Prostatic Hyperplasia, Prostate Cancer,.
- ✓ Endocrine System:
  - Thyroid Disorders (Hyperthyroidism, Hypothyroidism), Obesity, Diabetes Mellitus, Dyslipidemias, Cushing syndrome, Osteoporosis
- ✓ Symptomatic approach:
  - Constitutional and non-differentiated symptoms: Headache, Weakness and Fatigue, Weight loss, Fever, Syncope, Dizziness.
  - CVS Related Symptoms: Chest pain, High or low BP, heart murmur, Leg edema, orthopnea, Irregular rhythm, Palpitation.
  - Respiratory Related Symptoms: Dyspnea, Wheezing Cough, Hemoptysis, and Pleural effusion.
  - GIT Related symptoms: Heartburn, Epigastric pain, Nausea and vomiting, Dysphagia, Diarrhea, Constipation, Melena, Hematemesis, Abdominal pain, Abdominal distention, Ascites, Jaundice, Weight Loss.
  - Genitourinary Related symptoms: loin pain, Pyuria, Hematuria, Microalbuminuria, Proteinuria, Dysuria, frequency. Urgency,
  - Endocrine related symptoms: Enlarged thyroid (Goiter), Polyuria, polydipsia, Hypoglycemia, Hyperglycemia, Polyphagia, Weight problem, Change in appetite, Heat or cold intolerance, Hirsutism.

### **C- Course 3: Common Rheumatologic, Neurologic and Hematologic Conditions in Family Medicine Practice, and Laboratory Work.**

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient Clinic & Consultant Clinic in Rheumatology Department
- ☞ Outpatient Clinic & Consultant Clinic in neurology Department
- ☞ The main laboratory of the hospital

- ❖ The resident should attend all educational activities: Meeting Grand Tour, Morning Report. Death Conference, Journal Club, and CME Activities

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



- ☞ Knowledge: Identify and describe the diagnosis, management, and treatment options for common rheumatologic, neurologic and hematologic conditions encountered in family medicine practice.
- ☞ Practice: Apply clinical skills and laboratory techniques to assess, diagnose, and manage these conditions, emphasizing the integration of evidence-based practices and patient-centered care.
- ☞ Attitude: Cultivate a compassionate and holistic approach to patient care by enhancing effective communication, cultural sensitivity, and ethical decision-making in the management of such conditions.
- ☞ Multidisciplinary Collaboration: Learn to work as part of a multidisciplinary team, collaborating with specialists, nurses, and allied health professionals to provide holistic patient care.
- ☞ Continuity of Care: Understand the importance of continuity of care, including transitioning patients from inpatient to outpatient settings and coordinating follow-up care.
- ☞ Perform appropriate & timely referrals of serious medical conditions
- ☞ Laboratory Skills: Demonstrate proficiency in laboratory procedures relevant to common medical conditions assessments, including interpretation of results and their implications for patient management.

Required Topics:

- ✓ Musculoskeletal System: Rheumatoid Arthritis, Gout and Pseudogout, Chronic Fatigue Syndrome, Osteoarthritis  
Musculoskeletal System related symptoms: Neck pain, Shoulder pain, Back pain, Hip pain, Knee pain, Foot pain, Arthralgia(s), Arthritis (monoarticular, polyarticular), Joint swelling.
- ✓ NS System: Cerebrovascular Accidents (Stroke) and Transient Ischemic Attack, Migraine, Meningitis, Epilepsy & Seizures, Sleep Disorders, Multiple Sclerosis, Parkinson Disease, Dementia & Delirium  
NS related symptoms: Headache, Dizziness and vertigo, Tremor, Seizures, Dementia, Coma, numbness, paresthesia, neuralgia, Migraines, Change in mood and sleeping Patterns.
- ✓ Hematopoietic System: Iron-Deficiency Anemia, Thalassemia, Sickle Cell Disease, Megaloblastic Anemia, Bleeding Disorders, Leukemias, Lymphomas, and Multiple Myeloma  
Hematopoietic System related symptoms: Anemia, Bruising, Polycythemia, lymphadenopathy, and hepato-splenomegaly.

### Year I Timetable Summary

Course	Title	Site & Topics	Time
1	Basic Academic Course: Family, Community and Population Health	<ul style="list-style-type: none"> <li>☞ Family &amp; Community Medicine Department / College of Medicine</li> <li>✓ Introduction to Family Medicine</li> <li>✓ Communication Skills</li> <li>✓ Principles &amp; Practice of Epidemiology</li> <li>✓ Principles of Biostatistics &amp; Public Health Informatics</li> <li>✓ Evidence-Based Medicine (EBM)</li> <li>✓ Clinical Decision Making &amp; Ethics</li> <li>✓ Epidemiology of CDs</li> <li>✓ Epidemiology of NCDs</li> <li>✓ Primary Healthcare, Nutrition, and Mental Health</li> <li>✓ Environment, Occupational, &amp; Social Health including Behavioral life</li> <li>✓ Health Management &amp; Economics</li> </ul>	4 Months
2	Common Medical Conditions in Family Medicine Practice	<ul style="list-style-type: none"> <li>☞ MoH/ Outpatient Clinic, Counselling Clinic, Inpatient Ward in a Teaching Hospital.</li> <li>Common Conditions in:</li> <li>✓ CV System</li> <li>✓ Respiratory System</li> <li>✓ GIT System</li> <li>✓ Urinary System</li> <li>✓ Endocrine system</li> </ul>	1 Month 1 Month 1 Month 1 Month
3	Common Rheumatologic, Neurologic and Hematologic conditions in Family Medicine Practice, and Laboratory Work	<ul style="list-style-type: none"> <li>☞ MoH/ Outpatient and Counselling Wards in a Teaching Hospital</li> <li>Common Conditions in:</li> <li>✓ Musculoskeletal system (Rheumatology)</li> <li>✓ NS System (Neurology)</li> <li>✓ Hematopoietic System (Hematology)</li> <li>✓ Central Lab</li> </ul>	1 Month 1 Month 1 Month 1 Month

## Year II

### **A- Course 1: Common Gynecological Conditions (including Breast Health & Infertility) in Family Medicine Practice.**

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient Clinic & Consultant Clinic for Gynecology
  - ☞ Counselling Clinic for Infertility
  - ☞ Counselling Clinic for Breast Health
  - ☞ Gynecology Inpatient Ward
- ❖ The resident should attend all educational activities: Meeting Grand Tour, Morning Report. Death Conference, Journal Club, CME Activities

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

- ☞ Develop proficiency in diagnosing and managing common gynecological conditions, including abdominal and pelvic pain, abnormal uterine bleeding, vaginal discharge, pelvic pain (including dysmenorrhea), pelvic masses (uterine and ovarian), dyspareunia, incontinence, breast complaints, amenorrhea, menopausal symptoms, and infertility.
- ☞ Cultivate effective communication strategies to discuss sensitive topics related to reproductive health, sexual health, and gynecological concerns.
- ☞ Provide counseling on contraception, fertility, & family planning options.
- ☞ Promote the importance of preventive care measures, including health education, regular screenings (e.g., Pap smears, HPV vaccinations), and educate patients about lifestyle modifications.
- ☞ Work collaboratively with specialists, including oncologists, radiologists, and surgeons, to provide comprehensive breast care.
- ☞ Understand current guidelines for breast cancer screening, including mammography and clinical breast examinations.
- ☞ Provide education to patients regarding breast health, self-examination techniques, and lifestyle modifications for reducing breast cancer risk.
- ☞ Identify and manage common benign breast conditions such as fibrocystic changes, mastitis, and fibroadenomas.

- ☞ Conduct thorough evaluations of patients presenting with infertility, including medical history, physical examination, & laboratory tests.
- ☞ Develop follow-up care plans for patients undergoing infertility treatment, monitoring progress and addressing complications.
- ☞ Understand ethical issues related to informed consent, patient autonomy, and confidentiality in health care.
- ☞ Recognize when to refer patients to gynecology specialists for advanced care to provide comprehensive care.
- ☞ Acquire skills In Basic Gynecological Procedures:
  - Pap smears (cervical cancer screening)
  - Placement and removal of intrauterine devices (IUDs)

Required Topics:

- ✓ Menstrual Disorders (e.g., dysmenorrhea, premenstrual syndrome, menorrhagia, amenorrhea)
- ✓ Menopause and Related Problems
- ✓ Pregnancy-Related Issues (Abnormal uterine bleeding, Polycystic ovary syndrome, Endometriosis).
- ✓ Infections and Discharge of the Female Reproductive System, including Sexually Transmitted Diseases
- ✓ Pelvic Pain and Disorders (Pelvic inflammatory disease, Dyspareunia, Uterine and ovarian masses).
- ✓ Family Planning, Sexual health and Maternity Care
- ✓ Breast Health (Benign breast conditions, Breast cancer screening)
- ✓ Pap Smear Evaluation for Cervical Cancer
- ✓ Causes, Evaluation and treatment options ( Lifestyle Modifications, Medications, Surgical Interventions, Assisted Reproductive Technologies) of Infertility
- ✓ Follow-Up Care and Long-Term Management of infertility

**B- Course 2: Common Obstetrical and Neonatal Conditions in Family Medicine Practice.**

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient Clinic & Consultant Clinic for Antenatal Care
- ☞ Obstetrics Inpatient Ward, including Delivery Rooms
- ☞ Neonatal Ward
- ❖ The resident should attend all educational activities: Meeting Grand Tour, Morning Report. Death Conference, Journal Club, CME Activities

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

- ☞ Conduct comprehensive prenatal assessments, including history taking, physical examinations, and routine screenings.
- ☞ Identify and manage common obstetrical and neonatal conditions.
- ☞ Manage normal vaginal delivery.
- ☞ Provide excellent antenatal (including fetal growth monitoring), and postnatal care including promotive, preventive and rehabilitative aspects.
- ☞ Perform screening, counseling and health education in the issues related to mother and fetus aspects.
- ☞ Identify common pregnancy-related complications such as gestational diabetes, preeclampsia, and ectopic pregnancies.
- ☞ Identify and manage common postpartum issues, such as breastfeeding challenges and postpartum depression.
- ☞ Conduct postpartum assessments to monitor maternal health and recovery.
- ☞ Identify high risk patients, apply proper interventions and arrange appropriate and timely referrals for specialist care.
- ☞ Work effectively with obstetricians, midwives, nurses, and other healthcare professionals to ensure comprehensive care for patients.
- ☞ Acquire skills In Basic Obstetrics Procedures:
  - Apply ultrasound monitoring techniques for women during pregnancy to assess fetal development and maternal health.

Required Topics:

- ✓ Antenatal Care: Diagnosis of Maternal and Fetal Conditions, Establishing Due Dates, Screening, Progress Assessment, Nutrition and lifestyle during pregnancy, and Patient Education.
- ✓ High risk Pregnancy: Identification, proper initial management and referral.
- ✓ Common Medical problems in pregnancy: i.e. diabetes, hypertension, thyroid disease, anemia, smoking, etc.
- ✓ Complications of pregnancy: Antenatal bleeding, Ectopic pregnancy, Placental abruption and previa, Pre-eclampsia and eclampsia, Stillbirth and Abortions.
- ✓ Obstetric Emergency: i.e. preterm labor, premature rupture of membrane, fetal death)
- ✓ Delivery methods (vaginal vs. cesarean).

- ✓ Indications for cesarean section, and assisted delivery procedure (Obstructed labor, fetal distress, post-partum and intrapartum bleeding).
- ✓ Postnatal care: Follow-up, Health education, Counseling, Breast feeding, Nutrition, Prevent complications (Pupueral pyrexia, Depression, Mastitis, Thrombophlebitis), & Spacing.
- ✓ Common neonatal conditions: Newborn Prematurity and small for date, Neonatal Jaundice, Respiratory Distress Syndrome, Hypoglycemia, Infections, Congenital Anomalies (e.g., heart defects, neural tube defects, Cleft Lip and/or Palate)
- ✓ Diagnostic Ultrasound in pregnancy

### **C- Course 3: Common Pediatric Conditions in Family Medicine Practice**

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient Clinic for Pediatric Care
  - ☞ Consultant Clinic for Pediatric Care
  - ☞ Pediatric Inpatient Ward.
- ❖ The resident should attend all educational activities: Meeting Grand Tour, Morning Report. Death Conference, Journal Club, CME Activities

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

- ☞ Develop proficiency in diagnosing and managing common pediatric conditions.
- ☞ Cultivate Family-Centered Care and effective communication strategies with pediatric patients and their families to promote understanding, compliance, and a supportive care environment.
- ☞ Gain the ability to evaluate and monitor developmental milestones in children, identifying areas of concern and implementing appropriate interventions.
- ☞ Acquire knowledge and skills to provide comprehensive care for children with chronic diseases, ensuring proper management, education, and support for families.
- ☞ Identify and manage pediatric emergencies, including respiratory distress, seizures, and trauma.
- ☞ Screen for and identify behavioral and mental health issues in children, such as anxiety, depression, and attention disorders.

- ☞ Implement Preventive, family center Care: Promote the importance of preventive care through immunization, health education, & lifestyle interventions, emphasizing the role of family physicians in pediatric health.
- ☞ Collaborate with pediatricians, nurses, nutritionists, therapists, and social workers to provide holistic care while understanding when and how to refer patients to specialists for further evaluation and management.
- ☞ Acquire skills In Basic Pediatrics Procedures:
  - Venipuncture and IV cannulation
  - Laceration repair
  - Nasal suctioning
  - Lumbar puncture (with supervision)
  - Ear Examinations (including tympanometry)

Required Topics:

- ✓ Common pediatric presentations: Fever, excessive crying, pallor, colic, vomiting, diarrhea, constipation, abdominal pain, and rectal bleeding or itching.
- ✓ Growth and Development: Infant Feeding, Failure to thrive and Short Stature, Nutritional status, and obesity.
- ✓ Common Pediatric Infections (Respiratory, Ear, GIT, UTI).
- ✓ Common chronic condition: Asthma, DM, CKD.
- ✓ Common skin conditions: Rashes, Dermatitis, Purpura, & Petechiae.
- ✓ Neurological disorders: Convulsions, headaches, vertigo, and coma.
- ✓ Musculoskeletal issues, including arthritis, knee pain, and leg pain in children.
- ✓ Allergic Disorders: Food allergies, anaphylaxis, allergic rhinitis, and atopic dermatitis.
- ✓ Psychological disorders, Autism, Child Abuse, enuresis
- ✓ Learning disabilities and related disorders, including minimal brain dysfunction, mental retardation, and language, speech, and hearing disorders, Attention-Deficit/Hyperactivity Disorder.
- ✓ Common Congenital Anomalies: Clift lip and palate, undescended testes, CHD, microcephaly and macrocephaly.

## Year II Timetable Summary

Course	Title	Site & Topics	Time
1	Common Gynecological Conditions in Family Medicine Practice.	<ul style="list-style-type: none"> <li>☞ MoH/ Outpatient, Counselling, and Inpatient Wards for Gynecology in a Teaching Hospital</li> <li>✓ Menstrual Disorders</li> <li>✓ Menopause and Related Problems</li> <li>✓ Pregnancy-Related Issues.</li> <li>✓ Infections and Discharge of the Female Reproductive System, including STDs</li> <li>✓ Pelvic Pain and Disorders.</li> <li>✓ Pap Smear Evaluation for Cervical Ca</li> <li>✓ Family Planning and Sexual health</li> <li>☞ Breast Health Clinic, including cancer screening</li> <li>☞ Infertility Clinic, including Genetic Disorders</li> </ul>	<p>2 Months</p> <p>1Month</p> <p>1Month</p>
2	Common Obstetrical and Neonatal Conditions in Family Medicine Practice.	<ul style="list-style-type: none"> <li>☞ MoH/ Outpatient, Counselling, and Inpatient Wards for Obstetrics in a Teaching Hospital.</li> <li>✓ Antenatal Care: Diagnosis of Maternal and Fetal Conditions.</li> <li>✓ High risk Pregnancy.</li> <li>✓ Common Medical problems in pregnancy.</li> <li>✓ Complications of pregnancy.</li> <li>✓ Obstetric Emergency.</li> <li>✓ Delivery methods (vaginal vs. cesarean).</li> <li>✓ Postnatal care: Follow-up, Health education, Counseling, Breast feeding, Nutrition, Prevent complications &amp; Spacing.</li> <li>✓ Diagnostic Ultrasound in pregnancy</li> <li>☞ MoH/ Inpatient Neonatal Wards in a Teaching Hospital.</li> <li>✓ Common Neonatal Conditions &amp; Emergencies</li> <li>✓ Neonatal Assessment</li> <li>✓ Neonatal Screening</li> </ul>	<p>3 Months</p> <p>1 Month</p>
3	Common Pediatric Conditions in Family Medicine Practice	<ul style="list-style-type: none"> <li>☞ MoH/ Outpatient, Counselling, and Inpatient Wards for Pediatrics in a Teaching Hospital</li> <li>✓ Common pediatric presentations.</li> <li>✓ Nutrition, Growth and Development.</li> <li>✓ Common Pediatric Infections</li> <li>✓ Common chronic condition.</li> <li>✓ Common skin conditions.</li> <li>✓ Common Neurological disorders.</li> <li>✓ Psychological disorders, Autism, Child Abuse, enuresis</li> <li>✓ Common Congenital Anomalies: Clift lip and palate, undescended testes, CHD, microcephaly &amp; macrocephaly.</li> <li>✓ Learning disabilities and related disorders, Attention- Deficit/ Hyperactivity Disorder.</li> </ul>	<p>4 Month</p>



## Year III

### A- **Course 1:** Common Surgical, Urologic, Orthopedic, & Emergent Conditions:

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient Clinic and Consultant Clinic for Surgery
  - ☞ Outpatient Clinic and Consultant Clinic for Urology
  - ☞ Outpatient Clinic and Consultant Clinic for Orthopedics
  - ☞ Emergency Unit
  - ☞ Surgery Inpatient Ward.
- ❖ The resident should attend all educational activities: Meeting Grand Tour, Morning Report. Death Conference, Journal Club, CME Activities

a) In Surgical Ward:

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

- ☞ Diagnose and manage common surgical conditions such as acute abdomen, appendicitis, and perforated duodenal ulcer.
- ☞ Understand the presentations and management of common acute surgical emergencies.
- ☞ Develop skills in performing minor surgical procedures, including wound management, suturing, incision and drainage of abscesses, removal of small lipomas, and removal of ingrown nails.
- ☞ Understand the principles of preoperative assessments, including risk stratification and optimization of comorbidities.
- ☞ Manage common postoperative complications, including infections, deep vein thrombosis, and pain control.
- ☞ Recognize the indications for referral to surgery and follow-up care.
- ☞ Maintain detailed & accurate medical records, including preoperative evaluations, operative notes, and postoperative care plans.
- ☞ Communicate effectively with surgical teams and coordinate care across specialties.
- ☞ Appropriately refer patients needing advanced surgical interventions.
- ☞ Acquire skills In Basic Pediatrics Procedures:
  - Wound suturing and closure
  - Incision and drainage of abscesses
  - Removal of skin lesions (e.g., lipomas, cysts)
  - Removal of ingrown nails

Required Topics:

- ✓ Fluid & electrolytes Imbalance,
- ✓ Acute abdomen:
  - Acute appendicitis
  - Cholelithiasis and Cholecystitis
  - Perforated peptic ulcer
  - Intestinal obstruction
  - Diverticulitis
  - Others topics: Volvulus, pancreatitis, and trauma.
- ✓ Upper Gastrointestinal Bleeding
- ✓ Bleeding per Rectum
- ✓ Abdominal hernia
- ✓ Anorectal Disease and Hemorrhoids (Anal pain & Itching, skin ulcer)
- ✓ Colorectal Cancer.
- ✓ Diagnose and manage other conditions that may need surgery:
  - Breast lumps, and abscesses.
  - Thyroid nodules.
  - Diabetic foot and Gangrene
  - Mesenteric Ischemia.

b) In Urological Ward:

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

- ☞ Diagnose and manage common urological conditions such as urinary tract infections (UTIs), benign prostatic hyperplasia (BPH), urinary incontinence, and kidney stones.
- ☞ Understand the presentations and management of common acute urological emergencies, including obstructive uropathy and testicular torsion.
- ☞ Recognize when to refer patients to urology specialists for advanced care or surgical intervention.
- ☞ Coordinate follow-up care for patients with chronic urological conditions, ensuring ongoing management and monitoring.
- ☞ Acquire skills In Basic Urology Procedures:
  - Perform and manage urethral catheterization (male and female) for urinary retention or bladder drainage.
  - Perform bladder irrigation for patients with hematuria, clots, or catheter blockages, ensuring proper technique and patient safety.

Required Topics:

- ✓ Common Urological Conditions:
  - Urinary Tract Infections (UTIs): Diagnosis, treatment, and prevention.
  - Hematuria: Evaluation of blood in urine and its implications.
  - Benign Prostatic Hyperplasia (BPH): Symptoms, diagnosis, and management options.
  - Urinary Incontinence: Types, causes, and treatment strategies.
  - Kidney Stones: Management of symptoms and prevention of recurrence.
  - Prostatitis: Understanding acute and chronic forms.
- ✓ Urological Emergencies:
  - Acute Urinary Retention: Management and referral criteria.
  - Testicular Torsion: Recognizing symptoms and urgent referral.
  - Obstructive Uropathy: Causes, symptoms, and management.
- ✓ Malignancies:
  - Bladder Cancer: Risk factors, diagnosis, and management.
  - Prostate Cancer: Screening, diagnosis, and treatment options.
  - Kidney Cancer: Understanding symptoms, diagnostic approaches, and referral guidelines.

c) In Orthopedics Wards

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

- ☞ Perform a comprehensive musculoskeletal examination including the assessment of joints, bones, and soft tissues.
- ☞ Manage common orthopedic conditions (e.g., fractures, dislocations).
- ☞ Manage common orthopedic complications, such as post-fracture immobilization or rehabilitation challenges.
- ☞ Develop skills in practicing first aid in acute conditions, such as initial stabilization and splinting.
- ☞ Recognize when to refer patients to orthopedic specialists for advanced care or surgical intervention.
- ☞ Coordinate follow-up care for patients with chronic orthopedic conditions, ensuring ongoing management and monitoring.
- ☞ Acquire skills in Basic Orthopedic Procedures:
  - Apply and manage casts for fractures and soft tissue injuries, ensuring proper technique and patient safety.
  - Develop skills in performing minor orthopedic procedures, such as decompression of tendon sheaths and repair of soft tissue injuries

Required Topics:

- ✓ Common upper limb Fracture, Common Lower limb Fracture, Common axial Skeleton Fracture
- ✓ Common orthopedic conditions: Low Back Pain, Osteoarthritis, Rheumatoid Arthritis, Tendinitis affecting areas such as the shoulder (rotator cuff tendinitis), elbow (tennis elbow), and Achilles tendon, Bursitis commonly affecting the shoulder, elbow, hip, and knee, Plantar Fasciitis, Carpal Tunnel Syndrome, Shoulder Impingement Syndrome, Joint Dislocations, Tennis Elbow (Lateral Epicondylitis), Trauma, injury, & tears (meniscus).

d) In Emergency Department

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

- ☞ Manage acute medical and surgical emergencies (e.g., trauma, acute abdomen, shock, myocardial infarction, respiratory distress).
- ☞ Triage and prioritize patients effectively based on severity and urgency of their conditions.
- ☞ Make rapid and accurate clinical decisions in critical situations, ensuring proper referral or transfer when necessary.
- ☞ Effective communication with patients, families, and healthcare team
- ☞ Work collaboratively with other healthcare professionals, including nurses, paramedics, and specialists, to ensure coordinated and efficient patient care.
- ☞ Acquire skills in Emergency Management:
  - Stabilize patients using ABC principles (Airway, Breathing, and Circulation).
  - Perform basic emergency procedures (e.g., intubation, basic life support, wound closure).
  - Provide Advanced life support skills (e.g., ACLS, ATLS)
  - Chest tube insertion and management of pneumothorax.

Required Topics:

- ✓ Cardiac Arrest, Diabetic Ketoacidosis.
- ✓ Respiratory Emergencies
- ✓ Common Injuries and traumas, including head trauma.
- ✓ Bites of Humans and Animals,
- ✓ Acute and Chronic Poisoning
- ✓ Burns, Urticaria, Angioneurotic Edema.

## B- Course 2: Common Psychiatry and Dermatology Conditions:

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient Clinic and Consultant Clinic for Dermatology
- ☞ Outpatient Clinic and Consultant Clinic for Psychiatry.
- ❖ The resident should attend all educational activities: Meeting Grand Tour, Morning Report, Death Conference, Journal Club, CME Activities

### a) In Psychiatry

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

- ☞ Develop skills to perform comprehensive psychiatric evaluations, including mental status examinations and psychosocial assessments,.
- ☞ Understand the indications, side effects, and interactions of psychotropic medications, and monitor patients for therapeutic effectiveness and adverse effects.
- ☞ Develop skills to manage psychiatric emergencies and crises, including suicide risk assessment and intervention strategies.
- ☞ Work effectively with psychiatrists, psychologists, social workers, and other mental health professionals to provide comprehensive care.
- ☞ Develop effective communication skills to engage patients in discussions about their mental health, treatment options, and self-management strategies.
- ☞ Familiarize with ethical principles related to patient confidentiality, informed consent, and capacity for decision-making.

Required Topics:

- ✓ Anxiety Disorder, Obsessive-Compulsive Disorder,
- ✓ Panic Disorder
- ✓ Depressive Disorders
- ✓ Schizophrenia,
- ✓ Alzheimer's Disease & Dementia,
- ✓ Post-Traumatic Stress Disorder (PTSD)
- ✓ Eating Disorders (e.g., Anorexia Nervosa, Bulimia)
- ✓ Sexual Dysfunction
- ✓ Alcohol And Substance Abuse (+ Nicotine addiction),
- ✓ Domestic Violence
- ✓ Psychotherapy in Family Medicine

## b) In Dermatology

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

- ☞ Develop skills to perform thorough skin assessments, including history-taking and physical examination of skin lesions, rashes, and other dermatological conditions.
- ☞ Recognize and manage common dermatological conditions, such as acne, eczema, psoriasis, dermatitis, skin infections, and benign and malignant skin lesions.
- ☞ Understand the use, indications, and side effects of topical and systemic dermatological medications.
- ☞ Promote skin health by educating patients on the prevention of skin disorders, the importance of regular skin assessments, and effective skincare practices.
- ☞ Collaborate effectively with dermatologists and ensure timely referrals to provide comprehensive care for complex dermatological conditions, while paying special attention to cultural, social, and ethical considerations in managing sensitive dermatological issues.
- ☞ Acquire skills in Dermatology practice:
  - Perform minor dermatological procedures, including cryotherapy, incision and drainage of abscesses, skin biopsy, and excisional surgery.
  - Apply intradermal and subcutaneous injections of corticosteroid for inflammatory skin conditions.
  - Conduct patch testing for contact dermatitis to identify allergens.

Required Topics:

- ✓ Bacterial skin infections: Impetigo, Cellulitis, Folliculitis, Staphylococcal scalded skin syndrome.
- ✓ Viral skin infections: Herpes simplex and zoster, Warts (common, plantar, genital), Molluscum contagiosum
- ✓ Fungal Infections of the Skin: Tinea infections (corporis, pedis, cruris, capitis), Candidiasis, Onychomycosis
- ✓ Parasitic infestations: Scabies, Pediculosis (head lice, body lice, pubic lice)
- ✓ Acne Vulgaris: Different types (comedonal, inflammatory, cystic)
- ✓ Eczema, Atopic dermatitis, Contact dermatitis (Patch testing and allergen identification)

- ✓ Psoriasis.
- ✓ Common Dermatoses, Urticaria, and angioedema
- ✓ Benign skin lesions: Seborrheic keratosis, Dermatofibroma, Lipoma, Skin tags, Rosacea
- ✓ Pigmentation disorders: Vitiligo, Melasma, Post-inflammatory hyperpigmentation
- ✓ Common Skin Cancers (Basal cell carcinoma, Squamous cell carcinoma, Melanoma, Precancerous lesions (actinic keratosis)
- ✓ Dermatological presentations of systemic diseases.
- ✓ Hair disorders: Alopecia (androgenetic, areata, telogen effluvium), Hirsutism
- ✓ Nail disorders: Paronychia, Ingrown toenails,
- ✓ Cutaneous drug reactions
  - Blistering disorders: Bullous pemphigoid, Pemphigus vulgaris

### C- Course 3: Common ENT and Ophthalmology Conditions:

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient and Consultant Clinics for Ear, Nose, and Throat (ENT)
- ☞ Outpatient and Consultant Clinics for Ophthalmology
- ❖ The resident should attend all educational activities: Meeting Grand Tour, Morning Report, Journal Club, CME Activities

#### a) In ENT

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

- ☞ Develop skills to perform comprehensive examinations of the ear, nose, throat, and related structures, including otoscopic examinations and nasopharyngoscopy.
- ☞ Gain proficiency in using diagnostic tools such as tuning forks for hearing tests, audiometry, and imaging studies (e.g., X-rays, CT scans) for appropriate conditions.
- ☞ Create individualized treatment plans for common ENT conditions, considering both pharmacological and non-pharmacological approaches.
- ☞ Understand the indications, dosages, and side effects of common ENT medications, including antibiotics, antihistamines, & corticosteroids.
- ☞ Develop skills in performing common outpatient procedures such as: Ear wax removal (aural toilet), Nasal packing for epistaxis (nosebleeds), and Throat swabs for culture.

- ☞ Work effectively with otolaryngologists and ensure timely referrals to provide comprehensive care for patients with ENT conditions.
- ☞ Promote ear health by educating patients on the prevention of hearing loss, the importance of regular hearing assessments, and effective ear care practices.
- ☞ Acquire skills in Management of common ENT conditions:
  - Use of Auroscope in ear and drum examination
  - Perform wax removal and ear canal cleaning.
  - Perform nasal packing for epistaxis management.

Required Topics:

- ✓ Common Ear Conditions: Acute Otitis Media, Chronic Otitis Media, Otitis Externa, Vertigo and Dizziness, Hearing Loss, Eustachian Tube Dysfunction
- ✓ Common Nose Conditions: Allergic Rhinitis, Epistaxis (Nosebleeds), Sinusitis, Nasal Polyps.
- ✓ Common Throat Conditions: Pharyngitis, Tonsillitis, Laryngitis
- ✓ Common ENT presentation: Runny Nose, Nasal Obstruction, Sore Throat, Coughing/Sneezing, Ear Pain, Snoring.
- ✓ Airway Issues/ Difficulty Breathing/ Mouth Breathing,
- ✓ Tinnitus (Ear Noise)
- ✓ Hoarseness/ Throat Clearing, Loss of Sense, of Smell and/or taste
- ✓ Head and Neck Malignancies

b) In Ophthalmology:

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

- ☞ Develop skills to perform thorough eye examinations, including visual acuity tests, pupil responses, and external eye assessments.
- ☞ Develop skills in performing common outpatient procedures such as: Fundoscopic examinations, and Foreign body removal from the eye
- ☞ Create individualized treatment plans for common ophthalmic conditions based on clinical findings and patient needs.
- ☞ Understand the indications, dosages, and side effects of common ophthalmic medications, including topical antibiotics, anti-inflammatory agents, and glaucoma medications.
- ☞ Work effectively with ophthalmologists and ensure timely referrals to provide comprehensive care for patients with complex eye conditions.



- ☞ Enhance communication skills to educate client/patients about eye health, treatment options, and preventive measures, while emphasizing the importance of regular eye examinations, protective eyewear, and practices to prevent eye injuries and diseases.
- ☞ Acquire skills in Management of common Eye conditions:
  - Conduct visual acuity tests
  - Safely remove foreign bodies from the conjunctiva and cornea.
  - Use of Ophthalmoscope in examining fundi

### Required Topics

- ✓ Refractive Errors: Myopia (Nearsightedness), Hyperopia (Farsightedness), Astigmatism, and Presbyopia.
- ✓ Lens disorder: Cataracts
- ✓ Intraocular Pressure-Related Disorders: Glaucoma
- ✓ Retinal Diseases: Diabetic Retinopathy Age-Related Macular Degeneration (AMD) Retinal Detachment
- ✓ Conjunctiva, Eyelid, and Gland conditions & Inflammatory Disorders:
  - Conjunctivitis (Red Eye) infections, allergies, or irritants.
  - Dry Eye Syndrome      • Uveitis, Blepharitis,      • Pterygium.
  - Hordeolum (Stye) & Chalazion
- ✓ Developmental Disorders
  - Amblyopia (Lazy Eye)      • Strabismus (Squint)
- ✓ Corneal Disorders: Keratoconus
- ✓ Traumatic Disorders: Foreign body
- ✓ Preventive Eye Care:
  - Importance of protective eyewear (sunglasses, safety glasses)
  - Strategies to reduce the risk of eye injuries
  - Tips for maintaining healthy vision (nutrition, hydration, screen time management)
  - Eye Health and Aging
  - Patient Education and Counseling
- ✓ Common presentations:
  - Swollen red eye, Itching, burning, or a heavy discharge in the eyes.
  - Pain, in or around the eye
  - Hazy, blurred, or double vision
  - Seeing flashes of light or sudden bright floating spots, Unusual, sensitivity to light or glare.

### Year III Timetable Summary

Course	Title	Site & Topics	Time
1	Common Surgical, Urological, Orthopedic, and Emergent Conditions	☞ MoH/ Outpatient & Consultant Clinics, and Surgical Wards in a Teaching Hospital ✓ Fluid & electrolytes Imbalance. ✓ Acute Abdomen, Upper & Lower GIT Bleeding ✓ Anal pain & Itching, skin ulcer.	1 Month
		☞ MoH/ Outpatient & Consultant Clinics for Urologic in a Teaching Hospital ✓ Hematuria, Urinary Incontinence ✓ Renal colic, Frequency, Urgency	1 Month
		☞ MoH/ Outpatient & Consultant Clinics for Orthopedic in a Teaching Hospital ✓ Common upper & Lower limb Fracture, ✓ Common axial Skeleton Fracture. ✓ Common orthopedic conditions	1 Month
		☞ MoH/ Emergency Unit (CCU and ICU): ✓ Cardiac Arrest, Diabetic Ketoacidosis, ✓ Common Injuries including head trauma, ✓ Bites of Humans and Animals, ✓ Burns, Urticaria, Angioneurotic Edema.	1 Month
2	Common Psychiatry and Dermatology Conditions	✓ MoH/ Outpatient & Consultant Clinics for Psychiatry in a Teaching Hospital. ✓ Anxiety Disorder, Obsessive-Compulsive Disorder, Panic Disorder ✓ Depressive Disorders, Schizophrenia, ✓ Alzheimer's Disease & Dementia, ✓ Post-Traumatic Stress Disorder (PTSD) ✓ Eating Disorders, Sexual Dysfunction ✓ Alcohol And Substance Abuse ✓ Domestic Violence, Psychotherapy.	2 Months
		☞ MoH/ Outpatient and Counselling Clinics for Dermatology in a Teaching Hospital. ✓ Inflammatory & Infectious Skin Disorders ✓ Neoplastic Skin Disorders ✓ Skin Manifestations of Systemic Diseases	2 Months
3	Common ENT and Ophthalmology Conditions	☞ MoH/ Outpatient & Consultant Clinics for ENT in a Teaching Hospital. ✓ Common Ear, Nose, Throat Conditions ✓ Difficulty Breathing/ Mouth Breathing, ✓ Hoarseness/Frequent Throat Clearing, Loss of Sense of Smell and/or taste	2 Months
		☞ MoH/ Outpatient & Consultant Clinics for Ophthalmology in a Teaching Hospital. ✓ Refractive Errors. ✓ Cataracts, Glaucoma, Retinopathy ✓ Conjunctiva, Eyelid, and Gland conditions ✓ Developmental Disorders ✓ Traumatic Disorders: Foreign body	2 Months

## Year IV

### **A- Course 1: Geriatric Healthcare, Nutritional Health & Diagnostic Imaging in Clinical Practice**

**Learning Settings:** The following settings in a MoH Teaching Hospital

- ☞ Outpatient and Consultant Clinics for Geriatric health and Nutrition
- ☞ Imaging Department
- ❖ The resident should attend all educational activities: Morning Report, Journal Club, CME Activities

#### a) In Geriatric Healthcare

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

- ☞ Learn to perform Comprehensive Geriatric Assessment, including physical, cognitive, functional, and social evaluations.
- ☞ Identify common geriatric health conditions like frailty, falls, polypharmacy, and delirium.
- ☞ Understand the management of chronic diseases (hypertension, diabetes, heart failure) in older adults, considering age-related changes in pharmacokinetics and pharmacodynamics.
- ☞ Manage mobility issues with appropriate interventions, including physical therapy and assistive devices.
- ☞ Assess the impact of social factors (living situation, caregiver support, financial status) on elderly patients' health.
- ☞ Work effectively in a multidisciplinary team, including nursing, social work, and rehabilitation services, to provide holistic care for older adults.

Required Topics:

- ✓ Comprehensive Geriatric Assessment (CGA)
- ✓ Management of Chronic Diseases
- ✓ Pharmacotherapy and Polypharmacy
- ✓ Mental Health in the Elderly
- ✓ Nutrition and Weight Management
- ✓ Mobility and Fall Prevention
- ✓ Incontinence Management
- ✓ Social and Environmental Determinants of Health
- ✓ Preventive Healthcare
- ✓ Rehabilitation and Functional Decline
- ✓ Caregiver Support and Education

b) In Nutrition Healthcare:

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

- ☞ Learn how to conduct a thorough nutritional assessment, including dietary history, anthropometric measurements, and lab-based evaluations (e.g., micronutrient levels).
- ☞ Identify signs of malnutrition, obesity, and micronutrient deficiencies in various patient populations.
- ☞ Develop skills in providing individualized nutritional counseling for patients with specific needs, such as those with diabetes, cardiovascular disease, obesity, and gastrointestinal disorders.
- ☞ Promote healthy eating habits based on evidence-based guidelines (e.g., Mediterranean diet, DASH diet).
- ☞ Understand the pathophysiology of obesity and its related complications (hypertension, dyslipidemia, diabetes).
- ☞ Implement comprehensive management plans that include dietary changes, physical activity, behavioral interventions, and pharmacotherapy when necessary.
- ☞ Collaborate with dietitians, nutritionists, and other healthcare professionals to provide comprehensive nutritional care.

Required Topics:

- ✓ Nutritional Assessment in Clinical Practice
- ✓ Nutrition through the Life Cycle
- ✓ Dietary Interventions for Chronic Diseases:
- ✓ Clinical Nutrition and Diet Therapy
- ✓ Obesity and Weight Management
- ✓ Malnutrition and Undernutrition
- ✓ Nutrition and Disease Prevention
- ✓ Medical Nutrition Therapy (MNT)
- ✓ Food Allergies and Intolerances
- ✓ Nutrition and Pharmacotherapy
- ✓ Nutrition Education and Counseling
- ✓ Clinical Research and Evidence-Based Practice on nutrition

c) In Diagnostic Imaging Department

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

- ☞ Gain knowledge of different imaging techniques, including X-rays, ultrasound, CT (Computed Tomography) scans, and MRI (Magnetic Resonance Imaging) and understand their indications, limitations, and contraindications.
- ☞ Recognize the appropriate use of these modalities in the diagnosis and management of various medical conditions. Demonstrate competence in interpret the images related to common medical or surgical conditions.
- ☞ Understand which imaging modalities are first-line choices for common conditions like fractures, chest infections, abdominal pain, and neurological disorders.
- ☞ Understand the risks associated with radiation, particularly in vulnerable populations such as pregnant women and children.
- ☞ Learn to effectively communicate with radiologists to ensure proper imaging studies are performed and accurate interpretations are obtained.

Required Topics:

- ✓ Imaging Modalities: Types and indications
- ✓ Radiation Safety and Protection
- ✓ Clinical Applications of Imaging
- ✓ Image Interpretation
- ✓ Imaging Protocols and Techniques
- ✓ Pediatric Imaging

**B- Course 2:** } Healthcare Provision in PHC “Job Shadow”  
**C- Course 3:** }

**Learning Settings:**

- ☞ Family Medicine Specialty Primary Healthcare Center
- ❖ The resident should attend all educational and CME activities
- ❖ The student should participate in all community oriented activities and programs

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

- ☞ Identify and assess a wide range of health conditions across various age groups, with a particular focus on Maternal and Child Health.
- ☞ Deliver comprehensive healthcare services to address common medical issues within the community.

- ☞ Recognize the roles of different healthcare professionals within the team and develop collaborative skills to enhance patient care.
- ☞ Foster long-term relationships with patients and their families to build trust and ensure continuity of care.
- ☞ Engage patients in the decision-making process regarding their health and treatment plans.
- ☞ Acquire skills to provide effective health education and counseling on topics such as nutrition, physical activity, smoking cessation, stress management, lifestyle modifications, sexual health, & mental health.
- ☞ Comprehend the influence of social determinants of health on patient outcomes.
- ☞ Maintain accurate and timely medical records using electronic health records (EHR) systems.
- ☞ Practice the principles of timely referral.
- ☞ Prescribe medications safely and responsibly.
- ☞ Implement comprehensive primary healthcare programs that encompass continuous care.
- ☞ Implementing patient safety and quality improvement initiatives in primary care settings.
- ☞ Participate in community outreach programs to promote health and wellness.
- ☞ Understand the importance of staying updated with current research and evidence-based guidelines in family medicine.

Required Topics:

- ✓ Preventive care and health maintenance
- ✓ Acute care for common illnesses and injuries
- ✓ Communicable and non-communicable disease management
- ✓ Pediatrics and adolescent medicine
- ✓ Women's health and obstetrics
- ✓ Geriatric care
- ✓ Mental health and behavioral medicine
- ✓ Pain management
- ✓ Community medicine and public health
- ✓ Palliative and rehabilitative care
- ✓ MoH regulations, Guidelines, and reports

## Year IV Timetable Summary

Course	Title	Site & Topics	Time
1	Geriatric Healthcare, Nutritional Health & Diagnostic Imaging in Clinical Practice	<ul style="list-style-type: none"> <li>✓ MoH/ Geriatric Outpatient in a Teaching Hospital</li> <li>✓ Comprehensive Geriatric Assessment</li> <li>✓ Management of Chronic Diseases</li> <li>✓ Pharmacotherapy and Polypharmacy</li> <li>✓ Mental Health in the Elderly</li> <li>✓ Nutrition and Weight Management</li> <li>✓ Mobility and Fall Prevention</li> <li>✓ Incontinence Management</li> <li>✓ Preventive Healthcare</li> <li>✓ Rehabilitation and Functional Decline</li> <li>✓ Caregiver Support and Education</li> </ul>	1 Months
		<ul style="list-style-type: none"> <li>☞ MoH/ Nutrition Outpatient in a Teaching Hospital.</li> <li>✓ Nutritional Assessment in Clinical Practice</li> <li>✓ Nutrition through the Life Cycle</li> <li>✓ Dietary Interventions for Chronic Diseases</li> <li>✓ Clinical Nutrition and Diet Therapy</li> <li>✓ Obesity and Weight Management</li> <li>✓ Malnutrition and Undernutrition</li> <li>✓ Medical Nutrition Therapy (MNT)</li> <li>✓ Food Allergies and Intolerances</li> <li>✓ Nutrition and Pharmacotherapy</li> <li>✓ Nutrition Education and Counseling</li> <li>✓ Clinical Research and EBM on nutrition</li> </ul>	1 Month
		<ul style="list-style-type: none"> <li>☞ MoH/ Imaging Department a Teaching Hospital.</li> <li>✓ Imaging Modalities: Types and indications</li> <li>✓ Radiation Safety and Protection</li> <li>✓ Clinical Applications of Imaging</li> <li>✓ Image Interpretation</li> <li>✓ Imaging Protocols and Techniques</li> <li>✓ Pediatric Imaging</li> </ul>	2 Month
2	Healthcare Provision in PHC “Job Shadow”	<ul style="list-style-type: none"> <li>✓ MoH/ Family Medicine PHC Centers.</li> <li>✓ Preventive care and health maintenance</li> <li>✓ Acute care for common illnesses &amp; injuries</li> <li>✓ Communicable and non-communicable disease management</li> </ul>	4 Months
3	Healthcare Provision in PHC “Job Shadow”	<ul style="list-style-type: none"> <li>✓ Pediatrics and adolescent medicine</li> <li>✓ Women's health and obstetrics</li> <li>✓ Geriatric care</li> <li>✓ Mental health and behavioral medicine</li> <li>✓ Pain management</li> <li>✓ Community medicine and public health</li> <li>✓ Palliative and rehabilitative care</li> </ul>	4 Months

## ➤ Assessment of Students

The student assessment is done through the following:

- 1- Continues Assessment (Mandatory for the entrance of part I, Mid study, and part II Exams):
  - a) Log book: The students are required to keep a logbook where he/or she will record all procedures and activities. The activities must be dated and categorized to the rotation of the training and whether it was performed or observed by the resident. Participation and attendance in seminars and CME activities are also included. Each activity registered in the logbook must be countersigned by the Trainer.
  - b) Active participation in group discussion and seminar presentation
  - c) Assignment
  - d) Quizzes
  - e) Each week, Thursdays are reserved exclusively for formative assessment, supervisor communication and participating in the Journal Club
  - f) Attendance should registered and a copy of the attendance record from each training site will be kept for report and documentation.
- 2- Part I (Primary) exam (summative assessment): 120 MCQs exam at the end of first year.

### Blueprint for part I Exam (Year I): Family, Community, and Population Health

Topics	Credits %	No. of Exam MCQs
1) Introduction to Family, Community and population Health healthcare	4	5
1) Principles and practice of Epidemiology	13	16
2) Principles of Biostatistics	13	16
3) Applying Evidence-Based Medicine in Practice	8	10
4) Clinical Decision Making	7	8
5) Primary Healthcare, including Nutrition, Mental Health, Geriatric health, National Health Programs	16	19
6) Epidemiology of Communicable Diseases	14	16
7) Epidemiology of Non-Communicable Diseases	8	10
8) Environment, Occupational, and Social Health including Behavioral life (Violence and Substance abuse).	12	14
9) Health Management & Economics	5	6
<b>Total</b>	<b>100</b>	<b>120</b>



3-Mid study exam (Year III, mandatory to enter part II Exam): 50 MCQs exam in introduction to family medicine with 60% passing score

4-Discussion of dissertation (Year III, mandatory to enter part II Exam)

5-Part II Exam: at the end of fourth year consists of the following:

a) Theory Exam (50%):

- Paper 1: 100 Clinical-based multiple-choice questions (MCQs) in Common Medical and Surgical Conditions
- Paper 2: 100 Clinical-based multiple-choice questions (MCQs) in Common Conditions in Pediatrics, Gynecology, and Medical Subspecialties

**Blueprint for part I Exam (Year IV): Comprehensive Family Medicine Practice in Primary Healthcare Settings**

<b>Part II, Paper 1 Exam Topics: Common Medical and Surgical Conditions (100 MCQS)</b>	<b>Credits % (No of MCQS)</b>
1) Cardiovascular Problems	16
2) Respiratory Problems	15
3) Gastrointestinal (+ liver & Pancreas) Problems	15
4) Renal and Urologic Problems	12
5) CNS problems, Psychiatric &	12
6) Hematology problems and Blood Disorders	12
7) Endocrine Problems and Metabolic Disorders	10
8) Family Medicine Principles: Including Disease Prevention, Health Promotion, and Ethical Healthcare Practice	8
<b>Part II, Paper 2 Exam Topics: Common Conditions in Pediatrics, Gynecology, and Medical Subspecialties (100 MCQS)</b>	<b>Credits % (No of MCQS)</b>
1) Women Health & Problems Related to the Female Reproductive System	26
2) Pediatric Health and Problems	26
3) Common Musculoskeletal & Orthopedic Problems	12
4) Common Dermatologic Conditions	8
5) Common Ear, Nose, and Throat Problems	8
6) Common Disorders of the Eye	8
7) Emergency Medicine & Injury management	6
8) Elderly Care & Behavioral Disorders	6

b) Clinical Exam (50%):

- ☞ Objective Structured Clinical Examination (OSCE).
- ☞ 10 clinical based slides Exam (OSPE)
- ☞ Viva Exam

Final OSCE & OSBE of Family Medicine Blueprint (15 Stations)					
Topics Domains		Prevention	Skills & Management	Inter-pretation	Total
1	Health Education, Counselling, and Medical Ethics	2			2
2	Common Medical Conditions	1	1	1	3
3	Common Surgical Conditions		1	1	2
4	Common Pediatric Condition	1	1	1	3
5	Common Gynecological & Obstetrical Conditions	1	1	1	3
6	Diagnostic imaging			1	1
7	Lab Test, ECG interpretation			1	1
<b>Total Questions</b>		<b>5</b>	<b>4</b>	<b>6</b>	<b>15</b>

### **NOTES**

- 1) Attendance of more than 85% of educational activities, Continues assessment & supervisor approval are mandatory for participation in the exam
- 2) In part II Exam, Passing the written exam is mandatory to join the practical exam
- 3) The minimum passing mark for written or clinical exam is 70%.
- 4) Each student is given four attempts to pass either the Part I or Part II exam.  
Failure to do so will result in their dismissal from the academic program
- 5) The exam is conducted in April and October

### ➤ **Recommended Books in Family Medicine (last versions) :**

- 1) Swanson's Family Medicine Review by Tallia & Scherger & Dickey
- 2) Textbook of Family Medicine by Robert E Rakal & David Rake
- 3) Family Medicine Pretest Self-Assessment and Review by Doug Knutson.
- 4) Graber and Wilbur's Family Medicine Examination & Board Review
- 5) Bratton's Family Medicine Board Review by Robert L. Bratton
- 6) National Health Reports, Programmes and surveys by MoH, and WHO

### ➤ **Recommended websites in Family Medicine**

- 1) Medscape: [www.medscape.com](http://www.medscape.com)
- 2) American Academy of Family Physicians (AAFP): [www.aafp.org](http://www.aafp.org)
- 3) Family Medicine Digital Resources Library: [www.fmdrl.org](http://www.fmdrl.org)
- 4) DynaMed: [www.dynamed.com](http://www.dynamed.com)
- 5) BoardVitals: [www.boardvitals.com](http://www.boardvitals.com)