

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-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 centers. It recognizes the importance of building long-term relationships with patients 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 centers 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, equip with the necessary skills, ethical principles, and commitment to upholding high social standards and moral values to provide comprehensive care in primary health care centers.

- **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 continuing care with the patient and family.
- 2) Develops relationships with patient and his family from all physical, social and psychological aspects and meet their needs and fulfill their expectations.
- 3) Recognizes the common health problems of the society & having the ability for prioritizing them.
- 4) Demonstrates clinical competence in respect to diagnosis and management of acute and chronic problems commonly seen in primary care, using a holistic approach in recognizing the physical, the psychological and the social domains of 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 Medicine
This part is intended to provide candidates with knowledge and skills of scientific basis in family medicine. It consists of 4 months training in the training centers of medical colleges to cover the basic scientific topics in general principles of Epidemiology and Biostatistics, Epidemiology of Communicable and Non-Communicable Disease, Primary Healthcare, Behavioral and Social sciences, Environmental and Occupational Health, Administration and management of health services, Introduction to Family Medicine, and Research Work.
- Course 2: Internal Medicine
- Course 3: Internal Medicine (2 Months) + Laboratory Work (2 Months)

(* Total Internal Medicine training is 6 months)

II- Year II:

- Course 1: Gynecology
- Course 2: Obstetrics (2 Months) + Pediatrics (2 Months).
- Course 3: Pediatrics

(* Total Gynecology & Obstetric training is 6 month

(* Total pediatric training is 6 months)

III- Year III:

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

IV- Year IV:

- Course 1: Radiology + CT (2 Months) + Ultrasound + 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			
	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>
I	Introduction to FM and Community Medicine (College of Medicine)				Internal Medicine (Cardio-Respiratory + Endocrinology + Neurology)				Internal Medicine (Nephrology + Rheumatology) + Lab Work			
II	Gynecology				Obstetrics + Pediatrics (Neonatology)				Pediatrics			
III	General Surgery + Orthopedics + Accidents & Emergency				Psychiatry + Dermatology				ENT + Ophthalmology			
IV	Radiology + CT Scan + US + MRI				Family Medicine Training Center				Family Medicine Training Center			

• Details of Topics

I- Family, Community and Population Health (Course 1, Year I).

1) Introduction to Family Medicine

Learning Objective: Understand and describe the evolution and the concepts of the specialty of Family medicine as a field focused on preventive care. And, identify the distinctive knowledge, skills, and competencies required for effective practice in Family Medicine.

Required Topics:

- History and Evolution
- Pioneers in 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-Centered Medical care & Comprehensive healthcare.
- Patient counselling

2) Principles and Practice of Epidemiology

Learning objective: 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 and 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: 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^2 test, ANOVA test)
- Estimation of Confidence Interval

4) Evidence-Based Medicine (EBM) in Practice

Learning objective: Demonstrate the ability to integrate evidence-based approaches into clinical decision-making through creating a clear and focused research questions using the PICO (Population, Intervention, Comparison, Outcome) framework. Also, 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

Learning objective: Demonstrate proficiency in incorporating clinical examination and test results into clinical decision-making processes. And, 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 & Communication Skills
 - ✓ Definition, Importance and Principles
 - ✓ The main communication models for doctor-patient relationship
 - ✓ Common Ethical dilemmas in clinical practice

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

Learning objective: Describe the fundamental concepts of epidemiology, including modes of transmission, risk factors, principles of disease surveillance & outbreak investigation, and methods of control & prevention for common communicable diseases in Iraq.

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

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

Learning objective: Describe the fundamental concepts of epidemiology, including risk factors, complications, principles of disease surveillance, and methods of prevention for common non-communicable diseases in Iraq.

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, Education and Communication for Health and Related National Health Programs

Learning objective: Describe the essential concepts, advantages, contents, programs, methods of delivery of primary healthcare services in 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
- Primary health care programs and indicators in Iraq
- Health Promotion and disease prevention
- Safe Drug Prescription, Polypharmacy and Drug Abuse.
- Herbal Medicine
- National PHC Preventive Programs (MCH, EPI, IMCI..etc).
- Electronic Health Records & Information Technology
- Practice in Health Education

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

Learning objective: Describe current environmental, occupation, Social and behavioral risks, assessment methods, health impacts of different environmental hazards, and be able to specify approaches for assessing, preventing, and controlling environmental and social problems that pose risks to human health and safety.

Required Topics:

- Principles of Sociology in Health Care
- 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: Develop and demonstrate effective strategies to plan for, evaluate, and lead the healthcare programs and activities, and apply effective strategies to improve healthcare services.

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

Topics of first course Year I	Credit Hour
1) Introduction to Family Medicine, Family Physician, and Preventive healthcare	0.5
2) Principles and practices of Epidemiology + Research Methods	3
3) Principles and Practices of Biostatistics	2.5
4) Applying Evidence-Based Medicine in Practice	1.5
5) Clinical Decision Making	1.5
6) Primary Healthcare, including Nutrition, Mental Health, Geriatric health, National Health Programs.	4
7) Epidemiology of Communicable Diseases	2.5
8) Epidemiology of Non-Communicable Diseases	1.5
9) Environment, Occupational, and Social Health including Behavioral life (Violence and Substance abuse).	2.5
10) Health Management & Economics	0.5
Total	20
Each credit hour = 15 Lectures, or 30 Hours Practical	

II- Common Medical Conditions in Family Medicine Practice (practical Training from Course 2, Year I till Course 4 Year IV).

1- Common Medical conditions:

Learning objective: Demonstrate competence in early diagnosis and management following common signs and symptoms:

- ☞ Constitutional and non-differentiated symptoms: Headache, Weakness and Fatigue, Weight loss, Fever, Syncope, Dizziness.
- ☞ As related to Cardiovascular System: Chest pain, High or low blood pressure, heart murmur, Leg edema, orthopnea, Irregular rhythm, Palpitation.

Topics:

- ✓ Hypertension, Ischemic Heart Disease (Acute Coronary Syndromes, Angina Pectoris, Myocardial infarction),
- ✓ Murmurs and Valvular Heart Disease, Heart Failure, Dysrhythmia,
- ✓ Peripheral Arterial Disease, Deep Venous Thrombosis and Pulmonary Thromboembolism
- ☞ As related to Respiratory System: Dyspnea, Cough, hemoptysis, Pleural effusion, pulmonary nodule, wheezing.

Topics:

- ✓ Acute Bronchitis and Pneumonia,
- ✓ Asthma, Chronic Obstructive Pulmonary Disease,
- ✓ Tuberculosis, Lung Cancer
- ☞ As related to GIT System: Heartburn, Epigastric pain, Nausea and vomiting, Dysphagia, Diarrhea, Constipation, Melena, Hematemesis, Abdominal pain, Abdominal distention, Ascites, Jaundice, Weight Loss.

Topics:

- ✓ 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,
- ✓ Irritable Bowel Syndrome, Malabsorption Syndromes,
- ✓ Diverticular Disease, Inflammatory Bowel Disease

- ☞ As related to Genitourinary System: loin pain, Pyuria, Hematuria, Microalbuminuria, Proteinuria, Dysuria, frequency. Urgency, Urinary Incontinence, Scrotal Pain, Masses, and swelling, genital lesions.

Topics:

- ✓ Cystitis and Bacteriuria, Pyelonephritis, Epididymitis and Prostatitis,
 - ✓ Urolithiasis, Benign Prostatic Hyperplasia,
 - ✓ Prostate Cancer, Renal failure.
- ☞ As related to Musculoskeletal System: Neck pain, Shoulder pain, Back pain, Hip pain, Knee pain, Foot pain, Arthralgia (s), Arthritis (monoarticular, polyarticular), Joint swelling.

Topics:

- ✓ Rheumatoid Arthritis, Gout and Pseudogout,
 - ✓ Chronic Fatigue Syndrome, Osteoarthritis
- ☞ As related to Nervous System: Dizziness and vertigo, Tremor, Seizures, Dementia, Coma, numbness, paresthesia, neuralgia, Migraines, Change in mood and sleeping Patterns.

Topics:

- ✓ Headache, including Migraine,
 - ✓ Meningitis, Epilepsy & Seizures,
 - ✓ Cerebrovascular Accidents (Stroke) and Transient Ischemic Attack,
 - ✓ Sleep Disorders, Multiple Sclerosis,
 - ✓ Parkinson Disease, Dementia and Delirium
- ☞ As related to Endocrine System: Thyroid nodule, Enlarged thyroid (Goiter), Polyuria, polydipsia, Hypoglycemia, Hyperglycemia, Polyphagia, Weight problem, Change in appetite, Heat or cold intolerance, Hirsutism.

Topics:

- ✓ Thyroid Disorders,
 - ✓ Obesity, Diabetes Mellitus, Dyslipidemias,
 - ✓ Osteoporosis
- ☞ As related to Hematopoietic System: Anemia, Bruising, Polycythemia, lymphadenopathy, hepatosplenomegaly.

Topics:

- ✓ Iron-Deficiency Anemia, Thalassemia, Sickle Cell Disease, Megaloblastic Anemia,
- ✓ Bleeding Disorders, Leukemias, Lymphomas, Multiple Myeloma

2- Common Surgical conditions:

Learning objective: Demonstrate competence in early diagnosis and manage the following common surgical conditions:

- ☞ Diagnose and refer of acute surgical conditions: Acute abdomen, Upper Gastrointestinal Bleeding, Bleeding per Rectum, Anal pain & Itching, skin ulcer.

Topics:

- ✓ Fluid & electrolytes Imbalance,
- ✓ Acute Appendicitis, Cholelithiasis and Cholecystitis, Perforating peptic ulcer, intestinal obstruction, Volvulus,
- ✓ Pancreatitis and Pancreatic Cancer, Lower GIT Bleeding,
- ✓ Anorectal Disease and Hemorrhoids, Colorectal Cancer, Abdominal hernia.
- ✓ Diagnose and manage other conditions that need surgery: Breast lump, Thyroid nodule, diabetic foot, Benign prostatic hypertrophy, Mesenteric Ischemia, Torsion of the testis, Hydrocele, Varicocele, Undescended testicle, Kidney, Ureter, Bladder, urethra Injury.
- ✓ Do minor surgeries: wound incision, removal of small lipoma and sebaceous cyst, removal of in-growing nail, insert canula and catheter, others.

3- Common Obstetrics & Gynecological conditions with women's health

Learning objective: Demonstrate competence in early diagnosis and management the following:

- ☞ Evaluate and manage the following signs and symptoms: Abdominal/pelvic pain, Abnormal uterine bleeding, Vaginal discharge, Vaginal bleeding, Pelvic pain including dysmenorrhea, Pelvic masses: uterine and ovarian, Dyspareunia, Incontinence, Amenorrhea and Menopausal symptoms, Infertility.
- ☞ Recognize the gynecological sign and symptoms of breast disease
- ☞ Recognize early signs and symptoms of pregnancy including ectopic pregnancy.

Topics

- ✓ Antenatal care, Common medical problems during pregnancy, Complications During Labor and Delivery (Postpartum Hemorrhage, Stillbirth, Spontaneous and Elective Abortion), Postnatal care: Common problems of puerperium (Depression, Mastitis, Endometritis, Thrombophlebitis).
- ✓ Common Gynecological problems: Vaginitis and Cervicitis, Dysmenorrhea and Premenstrual Syndrome, Abnormal Genital Bleeding, Pap Smear Evaluation for Cervical Cancer, Inflammatory Pelvic Disease, Menopause, Benign Breast Conditions, and Breast Cancer, Sexually Transmitted Diseases, Family Planning and Maternity Care, Infertility, Genetic Disorders and Pregnancy, Ectopic Pregnancy, Diagnostic Ultrasound in Obstetrics

4- Common Pediatric conditions:

Learning objective: Demonstrate competence in early diagnosis and management of the following:

- ☞ For new born: Newborn Prematurity and small for date, Jaundice, Respiratory distress and apnea, pallor, cyanosis, Edema-Distended abdomen, Petechia and purpura, Bulging fontanel, Seizure, Mass in the abdomen or back, Hypothermia, Fever, colic, Birth injuries.
- ☞ For infant: Fever, Excessive crying and irritability, Vomiting, Diarrhea, Constipation, Mass in the abdomen, Rectal bleeding, Failure to thrive, hematuria, Undescended testes, Stridor, Wheezing, Cough, Heart murmur, Microcephale and macrocephale, Seizures, Rash (Diaper rash, Eczema), Infectious purpura and petechia, pallor, Enlarged lymph nodes , Undescended testes.
- ☞ For Children: Abdominal pain, Mass in the abdomen, Diarrhea-Constipation, Rectal bleeding-Rectal itching, Hematuria-Frequency, Dysurea, Enuresis, Polyurea and polydipsia, Short stature, Obesity, Fever, Sore throat, Ear ache, Recurrent URTI, Wheezing, Tachycardi, Hypertension, Arthritis, Knee pain and leg pain, convulsion-Headache, Coma, Vertigo, Rashes and itching, Learning disabilities, Demonstrate fundamental knowledge in regard to the recognition of, Minimal brain dysfunction-Mental retardation, Disorders of language, speech and hearing, Reading disability Congenital anomalies, Chronic disease.

Topics:

- ✓ Growth and Development, Infant Feeding, Failure to Thrive and Short Stature,
- ✓ Care of the Newborn in PHC, Immunizations,
- ✓ Common Pediatric Infections (Respiratory, GIT, Renal), Child Asthma,
- ✓ Diaper Rash and Other Infant Dermatitis,
- ✓ Psychological disorders, Autism, Child Abuse,
- ✓ Attention-Deficit/Hyperactivity Disorder,
- ✓ Common Congenital Anomalies

5- Subspecialties: Common presentations in ENT:

Learning objective: Demonstrate competence in early diagnosis and management of the following:

- ☞ common conditions: Runny Nose, Sore Throat, Coughing/Sneezing, Ear Pain, Hearing Loss, Snoring,
- ☞ Airway Issues/Difficulty Breathing/Mouth Breathing,
- ☞ Tonsil or Adenoid Inflammation or Infection,
- ☞ Ear Noise (Tinnitus),
- ☞ Nose Bleeds (Epistaxis), Nasal Congestion/Nasal Itching and Rubbing, Hoarseness/Frequent Throat Clearing, Loss of Sense of Smell and/or taste

Topics:

- ✓ Acute Otitis Media, Chronic Otitis Media, Otitis Externa,
- ✓ Pharyngitis, Sinusitis, Allergic Rhinitis,
- ✓ Head and Neck Malignancies

6- Subspecialties: Common presentation in Ophthalmology conditions:

Learning objective: Demonstrate competence in early diagnosis and management of the following:

- ☞ Swollen red eye, Itching, burning, or a heavy discharge in the eyes,
- ☞ Severe, sudden eye pain, Recurrent 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

Topics:

- ✓ Conjunctivitis and Other Causes of a Red Eye,
- ✓ Cataracts, Glaucoma and Macular Degeneration,
- ✓ Foreign body & other Ocular Emergencies

7- Subspecialties: Common presentation of Dermatological problems:

Learning objective: Demonstrate competence in early diagnosis and management of the following:

- ☞ Skin rashes, Itching, Blister, Swelling, discoloration, ulcer.

Topics:

- ✓ Pyoderma and Cellulitis, Fungal Infections of the Skin,
- ✓ Pediculosis and Mite Infestations,
- ✓ Acne Vulgaris, Common Dermatoses, Urticaria, Psoriasis,
- ✓ Common Skin Cancers,
- ✓ Dermatological presentations of systemic diseases.

8- Subspecialties: Common presentation of Orthopedics conditions:

Learning objective: Demonstrate competence in early diagnosis and management of the following:

- ☞ Muscle pain, Bone pain, bone integrity,
- ☞ Limitation of movement, Pain on movement,
- ☞ Joint pain, abnormal texture & swelling.

Topics:

- ✓ Common upper limb Fracture, Common Lower limb Fracture,
- ✓ Common axial Skeleton Fracture, Common orthopedic conditions

9- Subspecialties: Common presentation in Psychiatry:

Learning objective: Demonstrate competence in early diagnosis and management of the following:

- ☞ Bad feeling, Insomnia, Hallucination, Delusion, and Flight of ideas.

Topics:

- ✓ Anxiety Disorder, Obsessive-Compulsive Disorder,
- ✓ Depressive Disorders, Schizophrenia,
- ✓ Alzheimer's Disease & Dementia,
- ✓ Posttraumatic Stress Disorder,
- ✓ Alcohol And Substance Abuse (+ Nicotine addiction),
- ✓ Eating Disorders, Sexual Dysfunction,
- ✓ Domestic Violence, Psychotherapy in Family Medicine

10- Subspecialties: Emergency unit CCU and ICU:

Learning objective: Demonstrate competence in recognize the presentation of patient who needs life supporting measures (Basic and advanced life support measures).

Topics:

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

11- Diagnostic Imaging:

Learning objective: Demonstrate competence in interpret the images related to common medical or surgical conditions.

- ☞ Medical imaging seeks to reveal internal structures, as well as to diagnose and treat disease.
- ☞ X-Ray, US (Ultrasound), CT (Computed Tomography), MRI (Magnetic Resonance Imaging), Screening & Diagnostic Mammography, DEXA (Bone Density), positron emission tomography (PET).

III- Family Physician in PHC Center “Job Shadow” (Course 2 and 3, Year IV)

Students start their family medicine training (Job shadowing) in specialized family centers.

Learning objective: Demonstrate competence in:

- ☞ Client or patient communication,
- ☞ Diagnose and manage common medical conditions,
- ☞ Accomplish family files recording (manual, electronic),
- ☞ Practice the principles of Consultation & referral,
- ☞ Safe drug prescription, ,
- ☞ Adopt comprehensive & PHC programs, continuous health care, social and psychological care

VI: Lists of Skills to be learned:

- 1) Suturing
- 2) Venipuncture & Arterial puncture
- 3) Injections: ID/SC/IM
- 4) Interpretation of arterial blood gases
- 5) Spirometry and Serial Peak Flow measurement.
- 6) Chest x-ray interpretation
- 7) Inhaler technique

- 8) ECG and Stress test interpretation
- 9) Use of Ophthalmoscope in examining fundi
- 10) Use of Auroscope in drum examination
- 11) Insertion of Foley catheters
- 12) Excision of cysts, naevi, and other lesions
- 13) Incision & Drainage of abscess
- 14) Foot care and wedge/partial/total resection of ingrown toe nail

- **Assessment of Students**

The student assessment is done through the following:

- 1- Continues Assessment (Mandatory for part II clinical exam, and the entrance of part I and part II written Exam):
 - 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): 100-120 MCQs exam at the end of first year.
 - ☞ Attendance of more than 85% of educational activities, in the first academic year, Continues assessment and supervisor approval are mandatory for participation of the student in the exam
 - ☞ The pass mark is 70%
 - ☞ The student has a maximum of three attempts to pass; exceeding this limit will lead to their dismissing from the academic program.
 - ☞ The exam is conducted in April and October

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

Topics	Credits %	No. of Exam MCQs
1) Introduction to Family Medicine, Family Physician, and Preventive healthcare	2	3
2) Principles and practice of Epidemiology	15	18
3) Principles of Biostatistics	13	15
4) Applying Evidence-Based Medicine in Practice	8	10
5) Clinical Decision Making	7	8
6) Primary Healthcare, including Nutrition, Mental Health, Geriatric health, National Health Programs	20	24
7) Epidemiology of Communicable Diseases	13	16
8) Epidemiology of Non-Communicable Diseases	8	10
9) Environment, Occupational, and Social Health including Behavioral life (Violence and Substance abuse).	12	14
10) Health Management & Economics	2	2
Total	100	120

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: Written 100 MCQs exam

➤ Paper 2: Written short essay exam (20 clinical cases)

Part II Exam Topics: Common Conditions (Medical and Surgical)	Credits %
1) Disease prevention and health promotion	4
2) Cardiovascular Problems	8
3) Respiratory Problems	8
4) Gastrointestinal (+ liver & Pancreas) Problems	8
5) Renal and Urologic Problems	6
6) Endocrine Problems and Metabolic Disorders	5
7) Hematology problems and Blood Disorders	6
8) CNS problems, Psychiatric & Behavioral Disorders, Elderly Care	9
9) Dermatologic Conditions	4
10) Emergency Medicine & Injury management	3
11) Common Musculoskeletal & Orthopedic Problems	6
12) Common Ear, Nose, and Throat Problems	4
13) Common Disorders of the Eye	3
14) Women Health & Problems Related to the Female Reproductive System	13
15) Pediatric health and Problems	13
Total	100

b) Clinical Exam (50%):

- ☞ Objective Structured Clinical Examination (OSCE).
- ☞ 10 clinical based slides Exam (OSBE)
- ☞ 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 Conditions	1	1	1	3
6	Diagnostic imaging			1	1
7	Lab Test			1	1
Total Questions		5	4	6	15

NOTES

- 1) In part II Exam, Passing the written exam is mandatory to join the practical exam.
- 2) The minimum passing mark for each exam is 70%.
- 3) 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 study.

• **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 Rakel
- 3) Essential preventive medicine by Ghai.
- 4) National Health Reports, Programmes and surveys by MoH

• **Recommended websites in Family Medicine**

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