

Msc 2nd part

Rheumatology and Immunology

✓ **Course Aims:**

The broad aims of the course are as follows:

1- To provide fellows with the knowledge, intellectual and professional skills required to perform as well-trained, productive independent clinical Rheumatologists and independent consultants and specialized care providers for patients with autoimmune, inflammatory and degenerative musculoskeletal disorders.

2- To provide a rigorous, exciting, and productive training experience for fellows interested in developing careers as independent specialized physician-scientists in rheumatology and immunology. This requires at least a three year commitment to the study of molecular and cellular mechanisms of arthritis, autoimmune, and musculoskeletal diseases

3- To provide an outpatient clinical experience with exposure to a broad spectrum of rheumatic diseases.

4- To allow the fellows to develop an educational role in the course by communicating their understanding to their peer groups, by means of presentations, lectures. The emphasis will be on self-learning.

5- To provide candidates with the ability to analyze literature, critically evaluate research, design and conduct of a research project.

✓ **Course content: 120 hours lectures**

	Subjects	Teaching hours
	Structure, function of joints, CT and muscles.	2 hrs

(module1) 3 credit Hours (45 teaching hours)	Immune & inflammatory response.	2 hrs
	Neuro-endocrinal aspects of the immune system & inflammation.	2 hrs
	The role of free radicals, endothelium, adhesion molecules in the etiopathogenesis of rheumatic diseases.	2 hrs
	cytokines and apoptosis in rheumatic disease	4 hrs
	Rheumatoid arthritis	4 hrs
	Sjogren's syndrome and	2 hrs
	Palindromic rheumatism.	2 hrs
	SLE	4 hrs
	Systemic sclerosis	3 hrs
	Dermatopolymyositis.	3 hrs
	Vasculitis	3 hrs
	Behcet disease.	2 hrs
	Spondyloarthropathies.	4 hrs
	Inflammatory diseases of muscles and other myopathies.	2 hrs
	Rheumatic diseases of childhood.	4 hrs
	Crystal deposition arthropathies.	2 hrs
	Osteoarthritis	3 hrs

**(module2) 3
credit
Hours
(45
teaching
hours)**

Infective arthritis	3 hrs
Osteoporosis	2 hrs
Paget's disease and osteomalacia	2 hrs
Osteonecrosis	2 hrs
Amyloidosis	2 hrs
Sarcoidosis	2 hrs
Haematologic associated arthropathies	2 hrs
endocrine associated arthropathies	2 hrs
Malignant disorders associated arthropathy	2 hrs
History taking and clinical examination	2 hrs
DD of different types of arthritis	2 hrs
Diagnostic tests procedures and laboratory markers in rheumatic diseases	3 hrs
Aspiration analysis and injection of joints & soft tissues.	3 hrs
Imaging of musculoskeletal system.	3 hrs
Fibromyalgia and psychogenic rheumatism	2 hrs
	2 hrs

	Renal bone diseases and Reflex Sympathetic dystrophy	
	Regional pain, entrapment neuropathy and related disorders	2 hrs
	Pregnancy and lactation in rheumatic diseases	2 hrs
(module3) 2 credit Hours (30 teaching hours)	NSAIDs	3 hrs
	Glucocorticoids	3 hrs
	Disease modifying anti-rheumatic drugs.	3 hrs
	Immunoregulatory agents.	3 hrs
	Anti-hyperuricemic drugs.	3 hrs
	Biologic Therapy	3 hrs
	Bone-strengthening agents.	3 hrs
	Rehabilitation of patients with rheumatic diseases	3 hrs
	Intra-articular therapy.	3 hrs
	Indications of surgery in rheumatic diseases.	3 hrs

✓ **Clinical training for MSc students: 210 teaching hours for 6 months**

Topic	Teaching hours
History taking, clinical examination and patient evaluation	6 hrs
Examine and evaluate Rheumatoid arthritis patients	6 hrs
Examine and evaluate patients of Sjogren's syndrome	6 hrs
Examine and evaluate patients of Palindromic rheumatism.	6 hrs
Examine and evaluate patients of SLE	6 hrs
Examine and evaluate patients of Systemic sclerosis	6 hrs
Examine and evaluate patients of Dermatopolymyositis.	6 hrs
Examine and evaluate patients of Vasculitis	6 hrs
Examine and evaluate patients of Behcet disease.	6 hrs
Examine and evaluate patients of Spondyloarthropathies.	6 hrs
Examine and evaluate patients of Inflammatory diseases of muscles and other myopathies.	6 hrs
Examine and evaluate patients of juvenile idiopathic and rheumatoid arthritis	6 hrs
Examine and evaluate patients of Crystal deposition arthropathies.	6 hrs
Examine and evaluate patients of Osteoarthritis	6 hrs
Examine and evaluate patients of Infective arthritis	6 hrs

Examine and evaluate patients of Osteoporosis	6 hrs
Examine and evaluate patients of Paget's disease	6 hrs
Examine and evaluate patients of osteomalacia	6 hrs
Examine and evaluate patients of Osteonecrosis	6 hrs
Examine and evaluate patients of Amyloidosis	6 hrs
Examine and evaluate patients of Sarcoidosis	6 hrs
Examine and evaluate patients of Haematologic associated arthropathies	6 hrs
Examine and evaluate patients of endocrine associated arthropathies	6 hrs
Examine and evaluate patients of Malignant disorders associated arthropathy	6 hrs
Differentiate between different types of arthritis	6 hrs
Select, evaluate and interpret Diagnostic tests procedures and laboratory markers in rheumatic diseases	6 hrs
Aspiration analysis and injection of joints & soft tissues.	12 hrs
Select and interpret Imaging of musculoskeletal system.	12 hrs
Examine and evaluate patients of Fibromyalgia	6 hrs
Examine and evaluate patients of psychogenic rheumatism	6 hrs
Examine and evaluate patients of Renal bone diseases and Reflex Sympathetic dystrophy	6 hrs

Examine and evaluate patients of Regional pain	6 hrs
Examine and evaluate patients of entrapment neuropathy and related disorders	6 hrs