هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications

Course Title:	Musculoskeletal and Integumentary Block
Course Code:	MSI361
Program:	Bachelor of Medicine, Bachelor of Surgery (MBBS)
Department:	NA
College:	College of Medicine
Institution:	Alfaisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 (2+2+0)
2. Course type **a.** University ☐ College ■ Department ☐ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Sem 5, Year 3
4. Pre-requisites for this course (if any)**:** Sem 3 and 4
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	36	55%
2	**PBL, LGD, Labs, CPC**	30	45%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	36
2	**Laboratory/Studio**	
3	**Tutorial**	30
4	**Others** (specify)	
	Total	66

B. Course Objectives and Learning Outcomes

1. Course Description

This course deals with the abnormal structure and function of common musculoskeletal and integumentary (MSI) disorders, with special emphasis on its pathology, microbiology, immunology, and pharmacology. It builds on the foundation and serves as an introduction to clinical aspects of MSI diseases, in terms of common presentation, signs, symptoms, clinical investigation, and therapeutic modalities. This course will also introduce medical students to the principles of history taking and physical examination.

2. Course Main Objective

Build on the foundation and serve as an introduction to clinical aspects of MSI diseases, in terms of common presentation, signs, symptoms, clinical investigation, and therapeutic modalities.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	

CLOs		Aligned PLOs
1.1	Describe the normal structure and function of the musculoskeletal & integumentary systems with pathophysiology of common diseases.	PLO1,9
1.2	Describe the epidemiological, environmental and genetic factors and biochemical processes of the cell with pathophysiology of common diseases of the musculoskeletal and integumentary system.	PLO2,9,30
1.3	Discuss the mechanism of action, important adverse effects and pharmacological basis of drugs used in the management of common musculoskeletal and integumentary conditions.	PLO6,12,16
1.4	Describe the clinical features, diagnostic criteria and management of musculoskeletal and integumentary disorders.	PLO7,9,12,16
2	**Skills :**	
2.1	Perform bacterial identification, characterization, and antibiotic susceptibility testing from positive blood cultures.	PLO4
2.2	Apply theoretical knowledge in how to approach a patient presenting with common musculoskeletal and integumentary symptoms such as joint pain, joint deformity, rash, muscle pain, bone pain and fractures.	PLO16,17,18
2.3	Interpret ECG findings and joint, bone and connective tissue imaging reports (X-ray, MRI, and CT), and serology reports in various musculoskeletal disorders.	PLO5,18
3	**Values:**	
3.1	Adhere to the attendance policy.	
3.2	Maintain professional conduct with colleagues, faculty, and staff.	

C. Course Content

No	List of Topics – including PBL, LGD, Lab, CPC	Contact Hours
1	Pathological aspects of bone diseases	4
2	Pathogenesis of Rheumatoid arthritis	2
3	Metabolic bone diseases	2
4	Markers of joints' and bones' disorders	1
5	Bone tumors	2
6	Pathology of skeletal muscle	1
7	Role of pathologist in diagnosing muscular disorders	1
8	Tumors of the soft tissue	2
9	Markers of connective and soft tissue disorders	1
10	Connective tissue disorders	3
11	Drugs for RA	1
12	Drugs for Gout	1
13	Drugs used in osteomyelitis and septic arthritis	1
14	Anti-resorptive and bone anabolic drugs	1
15	Drugs used in Myasthenia Gravis	1
16	Bone and joint infections	1
17	Arthritis I and II	2
18	Muscle dystrophies	2
19	Myopathies/Myasthenia Gravis	1
20	Sports medicine I: Joints' Trauma	1
21	Sports medicine II: Fractures	1

22	Sports medicine III: Approach to a patient with an MSK trauma	1
23	Connective tissue disorders I and II	2
24	Genetics of muscle disorders	2
25	Review of bone physiology	1
26	Review of skeletal muscle physiology and neuromuscular junction	1
27	Review of anatomy of synovial joints	1
28	Radiological aspects of joint diseases	1
29	Radiology of bone disease	2
30	Radiology of muscle and soft tissue tumors	1
31	Review of Histology & structure of the skin	1
32	Temperature Regulation and Fever-I	1
33	Acute and chronic dermatoses & Disorders of the epidermis-I	1
34	Acute and chronic dermatoses & Disorders of the epidermis-II	1
35	Blistering disorders & Connective tissue diseases	1
36	Treatment of acne, psoriasis and pruritus	1
37	Clinical features of acute and chronic inflammatory dermatoses	1
38	Acne and Miscellaneous skin conditions	1
39	Clinical features of common bacterial and fungal infections	1
40	Review of Histology & structure of the skin	1
41	Temperature Regulation and Fever- II	1
42	Treatment of skin infections, infestations & pigmentation disorders	1
43	Leishmaniasis & scabies	1
44	Bacterial & fungal skin infections	1
45	Immune surveillance in the skin	1
46	Clinical features of viral Infections and Infestations of the skin	1
47	Clinical signs and symptoms of blistering disorders	1
48	Connective tissue disorders	1
49	Panniculitis and vasculitis	1
50	Benign, pre-malignant and malignant skin lesions (clinical aspects)	1
51	Pathological aspect Benign, pre-malignant & malignant skin tumors	1
52	Melanocytic nevi and malignant melanoma	1
Total		66

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe the normal structure and function of the musculoskeletal & integumentary systems with pathophysiology of common diseases.	Lectures, PBLs, LGDs, Labs, CPC	Continuous, formative, and summative assessment
1.2	Describe the epidemiological, environmental and genetic factors and biochemical processes of the cell with pathophysiology of common diseases	Lectures, PBLs, LGDs, Labs, CPC	Continuous, formative, and summative assessment

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	of the musculoskeletal and integumentary system.		
1.3	Discuss the mechanism of action, important adverse effects and pharmacological basis of drugs used in the management of common musculoskeletal and integumentary conditions.	Lectures, PBLs, LGDs, Labs, CPC	Continuous, formative, and summative assessment
1.4	Describe the clinical features, diagnostic criteria and management of musculoskeletal and integumentary disorders.	Lectures, PBLs, LGDs, Labs, CPC	Continuous, formative, and summative assessment
2.0	**Skills**		
2.1	Perform bacterial identification, characterization, and antibiotic susceptibility testing from positive blood cultures.	Labs	Summative assessment
2.2	Apply theoretical knowledge in how to approach a patient presenting with common musculoskeletal and integumentary symptoms such as joint pain, joint deformity, rash, muscle pain, bone pain and fractures.	Lectures, PBLs, LGDs, Labs, CPC	Continuous, formative, and summative assessment
2.3	Interpret ECG findings and joint, bone and connective tissue imaging reports (X-ray, MRI, and CT), and serology reports in various musculoskeletal disorders.	Lectures, PBLs, LGDs	Continuous, formative, and summative assessment
3.0	**Values**		
3.1	Adhere to the attendance policy.		Continuous assessment
3.2	Maintain professional conduct with colleagues, faculty, and staff.		Continuous assessment

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	PBL	Weekly	5%
2	Final Exam	7	95%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

The CoM program established its own mentorship program that employs all full-time faculty as mentors. Through this program, every medical student in the program is assigned a mentor at the beginning of their first semester of studies. The program has a broad scope covering academic advising and counseling. The mentors handle all aspects related to academic advising,

including academic planning, academic performance review, advice on course drop or withdrawal, study skills, and time management.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	• Robbins and Cotran pathologic Basis of disease 8th Edition. Kumar, Abbas, Fausto, Aster • Davidson's Principals and Practice of Medicine, 21st Edition • Clinical Medicine by Kumar and Clark (Saunders Elsevier, 8th edition) • Radiology: Diagnostic Imagine: Peter Armstrong, Wiley-Blackwell, 6th edition (May11, 2009) • MIMS Medical Microbiology 4th Ed. By Richard Goering et. al. (ISBN 13: 9780323044752) • Microbiology: Mim's Medical Microbiology 4th edition, edited by Goering RV, Dockrell HM, Zuckerman M, Wakelin D, Roitt IM, Mims C, Chiodini PL. Mosby 2008 • Basic & Clinical Pharmacology, Bertram Katzung (Author), Susan Masters (Author), Anthony Trevor • Pharmacology, R. A. Harvey and P. C. Champe, Lippincott's Illustrated, 4th Edition
Essential References Materials	• www.cdc.gov • Bates' Guide to Physical Examination & History Taking Lynn S. Bickley, Robert A. Hoekelman, Barbara Bates, 10th Edition
Electronic Materials	PowerPoint presentations uploaded on Alfaisal E-learning Portal Integrated medical curriculum: http://imc.meded.com
Other Learning Materials	The Alfaisal Library provides a wide array of electronic databases of reference books and journals through multiple databases include ScienceDirect (TM).

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, Laboratories
Technology Resources (AV, data show, Smart Board, software, etc.)	AV (Audio-Visual), Smartboard, Moodle (E-learning Management)
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course and Faculty Evaluation Survey	Students	Survey

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	