Course Specification
Student Version

Course Title:	Musculoskeletal system
Course Code:	MSS 306
Department:	Basic Medical Sciences
Program:	Bachelor of Medicine and Surgery
College:	Vision College in Riyadh
Institution:	Vision College in Riyadh
Revised:	July 2025

A. Course Identification

1. Credit hours: 6 (4+1+1)
2. Level/year at which this course is offered: Level 6/Year 3
3. Pre-requisites for this course (if any): GAD 203, BAN 203, MBG 203, HBO 203 PDO 204, PDT 204, BPC 204
4. Co-requisites for this course (if any): None

B. Teaching Methods

1	Interactive lectures
2	Practical sessions
3	Seminar

C. Course Description and Objectives

1. Course Description

The course is designed to prepare the student for the study of the human skeleton and the function of various muscle groups that move these joints with the different nerves and plexuses responsible for their functions, the biochemical background for different elements needed for proper muscular function, the common microbial, biochemical and pathological diseases of MSK together with the common drugs used for treatment of these diseases.

2. Course Main Objective

The goal of this course is to explain the normal structure and function of the musculoskeletal and the pathogenesis of various diseases and the ways in which they affect this system, with reference to the pharmacological principles of drugs relevant to management of this diseases.

3. Course Objectives

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

- **Describe the normal microscopical and gross structure of various parts of the body including blood and nerve supply, origin, and insertion of muscles.**
- **Describe the function of various body organs and systems and the endocrine and neural control of these functions**
- **Determine surface anatomy and interrelationship of organs.**
- **Analyze case scenarios based on knowledge of the pathogenesis of common systematic metabolic autoimmune and neoplastic diseases.**
- **Apply knowledge of major drug interactions and side effects to case scenarios.**
- **Perform a structured comprehensive history taking including systems review, family, past, social, and occupational history.**
- **Include pertinent positive and negative findings in clinical history taking.**
- **Summarize the clinical history of the patient highlighting most important findings.**
- **Perform a full structured body system (nervous, cardiovascular, respiratory, gastrointestinal, musculoskeletal, renal, obstetric) physical examination on a mannequin or simulated patient.**

- **Collaborate with other colleagues during projects and group work showing respect for boundaries.**
- **Demonstrate positive group dynamics and teamwork skills during PBL, Seminar and OSCE.**
- **Create a self-development plan with milestones**
- **Show integrity and respect for intellectual property rights when using the literature or colleague's patient notes**

D. Course Content

No.	List of Topics
1	Anatomy of the body joints and musculature
2	Histology of musculoskeletal system components
3	Muscles and Bone Physiology
4	Pathology of disorders (inflammatory, metabolic, autoimmune and tumors) affecting musculoskeletal system and skin.
5	Musculoskeletal system and skin infections
6	Clinical aspects related to musculoskeletal system and skin (History taking, physical examination and imaging)
7	Pharmacological Treatment of disorders related to musculoskeletal system and skin.

E. Assessment Tools

#	Assessment task	Percentage of Total Assessment Score
1	Midterm Exam	20%
2	Continuous Assessment (quizzes&seminars)	20%
3	Final Written Exam	40%
4	OSCE&OSPE	20%
	Total	**100%**

F. Learning Resources

Essential References	• The Developing Human: Clinically Oriented Embryology. K.L. Moore and T.V.N Persaud, 8th edition. W.B. Saunders Co. • Jacqueira LC, Carneiro J, Kelly RO, eds. Basic Histology. 11th edn., Lange Reviews, 2007. • Textbook of Medical Physiology. Guyton and Hall, 12th edition.Elseviers Saunders. • Robbins &Cotran Pathologic Basis of Disease, 9e (Robbins Pathology), 2014 by Vinay Kumar and Abul K. Abbas. MBBS ISBN-13: 978-1455726134, ISBN-10: 1455726133 Edition: 9th • Medical Microbiology. Patrick R. Murray, Ken S. Rosenthal, Michael A. Pfaller, 6th edition. Mosby-ElSevier. • Basic & Clinical Pharmacology. B. G. Katzung, 12th edition. McGrow-Hill. • Bates' Guide to Physical Examination & History Taking. Bickley L.S., and P.G. Szilagyi, 10th edition. Lippincott Williams & Wilkins. • Betram G Katzung, ed. Basic and Clinical Pharmacology, 10th edn. Lange. 2004.
Supportive References	Snell RS. Clinical Anatomy for Medical Student, 7th edn., Lippincott,Williams&Wilkins, 2004.
Electronic Materials	• http://www.bbc.co.uk/science/humanbody/body/index_interactivebody.shtml • http://www.lumen.luc.edu/lumen/meded/grossanatomy/vhp/visible.htm Webpath. http://library.med.utah.edu/WebPath/webpath.html
Other Learning Materials	None