JINNAH SINDH MEDICAL UNIVERSITY

STUDY GUIDE	
PROGRAM	**MBBS**
MODULE TITLE	**ORTHOPEDICS MODULE**
ACADEMIC YEAR	**4th-year MBBS- 2026**
INTRODUCTION	Musculoskeletal diseases and injuries include conditions that affect joints, bones, muscles, the spine, and multiple body areas or systems such as connective tissues and blood vessels. An analysis of Global Burden of Disease (GBD) data in 2019 showed that globally approximately 1.71 billion people have musculoskeletal conditions. It is therefore essential to empower the students with core foundational knowledge related to the diagnosis, treatment, and prevention of musculoskeletal diseases and injuries.
RATIONALE	The Orthopedics module is designed to present knowledge and experience from clinical experts specializing in the area of trauma and orthopaedic surgery. It is a review of in-depth clinical aspects of trauma and orthopaedic surgery. The module builds upon the basic sciences knowledge gained during the Locomotor-1 & 2 modules in years 2 & 3 respectively.
OUTCOMES	By the end of the module, students will be able to justify management plans for common disorders related to Bones and joints by correlating the clinical conditions with the Pathophysiology
DEPARTMENTS INVOLVED	1. Community Medicine 2. Orthopedics 3. Radiology 4. Surgery

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MODULE OBJECTIVES	**By the end of the module, the students should be able to:**
<u>LECTURE</u> COMMUNITY MEDICINE	**1. Leadership- Health Planning** • Describe the Planning Cycle • Discuss the health planning process in Pakistan • Explain the types of health planning**.**
<u>LECTURES</u> ORTHOPEDICS	**1. Presenting problems and investigations of Musculoskeletal diseases** • Describe the presenting problems and investigations of Musculoskeletal diseases **2. Fractures** • Classify the different types of fractures • Describe the specific types of fractures (hip, Colles', and pelvic fractures) • Discuss the general principles of management of fractures • Describe the therapeutic measures for different fractures, the principles of fracture treatment in children, and common complications of fractures • Discuss the principles of fracture fixation **3. Back pain** • Identify the most common conditions causing back pain • Develop a plan for diagnosis and management of non-traumatic neck and back problems **5. Septic Arthritis** • Discuss the etiology, clinical features and investigations for the condition • Describe the plan of treatment and complications relevant to

	the condition
LECTURE **RADIOLOGY**	**1. Imaging of the musculoskeletal system** • Explain the role of radiologic imaging in musculoskeletal system diseases • Describe the principles of MRI, isotope bone scans, and CT scans **2. Imaging of bone tumors & Other** • List the techniques involved in the diagnosis of bone tumors • Identify common skeletal injuries on radiographic films (e.g. fractures and dislocations)
LECTURE **SURGERY**	**1.Maxillo-facial injuries** • Describe the mechanisms, assessment, and management of maxillofacial injuries
TUTORIAL **COMMUNITY MEDICINE**	**1. Planning cycle** • Identify the various stages of the planning cycle in a particular scenario • Recognize common planning tools and techniques • Develop the ability to apply planning principles to real-world scenarios.
SKILLS TO BE LEARNT DURING WARD ROTATIONS	**Procedures (Observe):** • Splinting • Intra-articular injections • Management of fractures
INTERNAL ASSESSMENT	• Internal assessment will be according to JSMU policy. The details of the internal assessment will be determined by the respective institutions. • Internal assessment carries 20% weightage in the final,

	end-of-year examination
ANNUAL EXAMINATION	• MCQs and OSCE (observed unobserved) • **All clinical topics of Orthopedics, Radiology & Surgery will be included in final year MBBS examinations also (as well as in relevant modules of 4th year MBBS).**
MODULE EVALUATION	• Course will be evaluated through a feedback form that is posted on the JSMU website
SUGGESTED READING	The following books can be referred to for further reading: • Apley's textbook of orthopedics • Bailey and Love Textbook of Surgery. • Ronald McRae practical fracture treatment.