

## JINNAH SINDH MEDICAL UNIVERSITY

STUDY GUIDE	
PROGRAM	MBBS
MODULE TITLE	ORTHOPEDICS MODULE
ACADEMIC YEAR	4 <sup>th</sup> year MBBS- 2024
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	Orthopedics module is designed to presents knowledge and
	experience from clinical experts specializing in the area of trauma and
	orthopedic surgery. It is a review of in-depth clinical aspects of trauma
	and orthopedic 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 of common disorders related to Bones and joints by correlating
	the clinical conditions with the Pathophysiology
DEPARTMENTS	1. Orthopedics
INVOLVED	2. Radiology
	3. Surgery
MODULE	By the end of the module, the students should be able to:
OBJECTIVES	

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LECTURES	1. Presenting problems and investigations of Musculoskeletal diseases
ORTHOPEDICS	Describe the presenting problems and investigations of Musculoskeletal diseases
	2. Fractures
	<ul> <li>Classify the different types of fractures</li> <li>Describe the specific types of fractures (hip, Colles', and pelvic fractures)</li> <li>Discuss the general principles of management of fractures</li> <li>Describe the therapeutic measures for different fractures, the principles of fracture treatment in children, and common complications of fractures</li> <li>Discuss the principles of fracture fixation</li> </ul>
	3. Back pain
	<ul> <li>Identify the most common conditions causing back pain</li> <li>Develop a plan for diagnosis and management of non-traumatic neck and back problems</li> </ul>
RADIOLOGY	1.Imaging of musculo-skeletal system
	<ul> <li>Explain the role of radiologic imaging in musculo-skeletal system diseases</li> <li>Describe the principles of MRI, isotope bone scans, and CT scans</li> </ul>
	2. Imaging of bone tumors & Other
	<ul> <li>List the techniques involved in diagnosis of bone tumors</li> <li>Identify common skeletal injuries on radiographic films (e.g. fractures and dislocations)</li> </ul>
SURGERY	Describe the mechanisms, assessment, and management of maxillo-facial injuries

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SKILLS TO BE	Procedures (Observe):
LEARNT DURING	
WARD ROTATIONS	Splinting
	Intra-articular injections
	Management of fractures
INTERNAL	Internal assessment will be according to JSMU policy. The
ASSESSMENT	details of internal assessment will be determined by the
	respective institutions.
	Internal assessment carries 20% weightage in the final,
	end-of-year examination
ANNUAL	MCQs and OSCE (observed unobserved)
EXAMINATION	
MODULE	Course will be evaluated through a feedback form that is
EVALUATION	posted on the JSMU website
SUGGESTED	Following books can be referred for further reading:
READING	Apley's textbook of orthopedics
	Bailey and Love Textbook of Surgery.
	Ronald McRae practical fracture treatment.
	Ronald McKde practical fractions fredittient.