

Course Specification Student Version

Course Title:	Orthopedics
Course Code:	ORT 612
Department:	Medicine
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 (2+0+4)
2. Level/year at which this course is offered: Level 12/Year 6
3. Pre-requisites for this course (if any): SUR 510
4. Co-requisites for this course (if any): None

B. Teaching Methods

1	Lecture
2	Tutorial (Case Based Tutorial)
3	Skill lab Sessions and Hospital Clinical Sessions

C. Course Description and Main objective

1. Course Description

This course is designed to provide students with the knowledge base and clinical skills in general orthopedics and its common subspecialties necessary for any physician, regardless of ultimate career choice. This course is designed to develop the student's skills in primary patient care, evaluation, therapy, assessment, and management of patients with musculoskeletal manifestations. There will be special emphasis on history taking and physical examination to help the student to establish the correct diagnosis, especially in common musculoskeletal disorders, and acquire adequate knowledge to manage orthopedic emergencies. During their clinical attachment, students will be exposed to different orthopedic subspecialties such as trauma, pediatrics, sports, arthroplasty, oncology, foot and ankle, and spine surgery.

2. Course Main Objective

This course aims to gain knowledge and clinical skills (history taking and physical examination), recognize the clinical features of the common diseases in general orthopedic surgery and its subspecialties and learn to create differential diagnoses based on the clinical assessment of patients with musculoskeletal manifestations.

3. Course Objectives

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

- Apply knowledge of anatomical structures to analyze and interpret clinical case studies or medical imaging.
- Analyze case scenarios based on knowledge of the pathogenesis of common systematic metabolic autoimmune and neoplastic diseases.
- Select the appropriate route for drug administration for different clinical orthopedic conditions.
- Perform a structured comprehensive history taking appropriate to orthopedic settings, including review, family, past, social, and occupational history.
- Perform a full structured physical examination appropriate to orthopedic settings, on patients, mannequin or simulated patient.
- Explain and interpret the principles of essential clinical investigations. (SKU 3.3)
- Formulate and implement appropriate management plans for patients with emergency problems and life-threatening conditions.
- Determine the process of ruling out and ruling in each of the differential diagnoses, and how to confirm differential diagnosis of orthopedic patients.
- Prioritize patients safety while performing common procedure of general orthopedics practice and manage clinical risks settings (orthopedics emergency).
- Demonstrate positive group dynamics and teamwork skills during OSCE.

D. Course Content

No.	List of Topics	
1	Principles of Orthopedics & orthopedics emergency	24
2	Bone infection& metabolic bone disorders	17
3	Common pediatric orthopedics disorders	11
4	Common spine disorders	12
5	Common sports and soft tissue injuries	7
6	Common shoulder disorders	13
7	Common foot and ankle disorders	7
8	Hip and knee degenerative disorders	13
9	Peripheral nerve disorders	9
10	Musculoskeletal, tumors, and orthopedics infectious diseases	7
Total		120

E. Assessment tools

#	Assessment task	Percentage of Total Assessment Score
1	Midterm Exam	30%
2	Logbook Evaluation	10%
3	Final Written Exam	30%
4	Objective Structured Clinical Examination (OSCE)	30%
	Total	100%

F. Learning Resources

Required Textbooks	<ul style="list-style-type: none"> Apley and Solomon's Concise System of Orthopedics and Trauma, 5th Ed, ISBN-13: 978-0367198770
Essential Reference Material	<ul style="list-style-type: none"> Clinical Orthopedic Examination by McRae, 6th Ed, ISBN: 9780702033933
Electronic Material	<ul style="list-style-type: none"> https://teachmeorthopedics.info/ https://www.orthopedicsportsdoctor.com/blog/orthopedic-shoulder-exam-tests https://youtu.be/17ZKya9yR2Y https://youtu.be/iTfDvFCPZ_w https://youtu.be/wILfNIls75RY https://teachmeorthopedics.info/examination-of-the-patient-with-a-suspected-spinal-cord-problem/ https://teachmeorthopedics.info/examination-of-the-patient-with-weakness-or-sensory-loss/ https://teachmeorthopedics.info/fractures-and-traumatic-dislocations-of -the-hip-in-children/

	<p>https://teachmeorthopedics.info/the-diagnosis-and-management-of-musculoskeletal-trauma/</p> <p>http://teachmeorthopedics.info/no-nacute-elbow-wrist-and-hand-conditions/</p>
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