



Sohag University



Faculty of Medicine

5th Year:
**Course specification Orthopaedics
& Trauma surgery (ORT-527)**

**Faculty of Medicine
Sohag University
2022 - 2023**

Head of Department:-

Prof. Dr./ Abdelrahman Hafez Khalefa.

dr.abdelrahman_alshikh@yahoo.com

Course Coordinator:

Ahmed Hamed Kassem

ahmedhamed@med.sohag.edu.eg

Course Specification prepared by

Dr./ Khalaf Fathy Elsayed Ahmed.

Khalaffathy@med.sohag.edu.eg



5th Year

Course specification:-Orthopaedics & Trauma surgery (ORT-527)

Programme (s) on which the course is given:- <u>Bachelor of Medicine and Surgery (M.B.B.Ch.), (Credit points)</u>	Elements (Major / Minor) of the program: <u>Undergraduate</u>
Department offering the program:- <u>Orthopaedics & Trauma surgery department.</u>	Department offering the course:- <u>Orthopaedics surgery department.</u>
Academic Year/Level: <u>5th Year</u>	Date of Specification approval:- <u>6 /3 2023</u>

A- Basic Information

Title:	Orthopaedics & Trauma surgery		
Code:	ORT-527		
Credit points: 5.5	Case based discussions: 21 hours		
Lectures: 15 hours	Clinical/practical training: 21 hours		
Prerequisites: Achieving 75% of points of blocks in the first 5 semesters.			

B- Professional Information

1 – Course Objective (Overall Aims):-

1. This block aims to provide students with fundamental knowledge and clinical skills that enable him/her to detect, manage and/or refer common and important orthopedics problems.
2. By the end of the blocks, the students will be able to take informative history, perform appropriately timed physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive, do some clinical procedures and interpret important investigations related to orthopedics problems.

2- Competency-Based Medical Education areas:

By the end of the course, the graduate should be able to:

Competency Area I: The graduate as a health care provider.

The graduate should be able to:



- 1.1. Take and record a structured, patient centred history.
- 1.2. Adopt an empathic and holistic approach to the patients and their problems.
- 1.3. Assess the mental state of the patient.
- 1.4. Perform appropriately timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.
- 1.5. Prioritize issues to be addressed in a patient encounter.
- 1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.
- 1.7. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.
- 1.8. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.
- 1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.
- 1.11. Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.
- 1.12. Adopt strategies and apply measures that promote patient safety.
- 1.13. Establish patient-centred management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.
- 1.14. Respect patients' rights and involve them and /or their families / carers in management decisions.
- 1.15. Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures.

Competency area II: The graduate as a health promoter.

The graduate should be able to:

- 2.5. Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.
- 2.6. Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.
- 2.9. Adopt suitable measures for infection control.

Competency area III: The graduate as a professional.

The graduate should be able to:

- 3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.
- 3.3. Respect the different cultural beliefs and values in the community they serve.



- 3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.
- 3.5. Ensure confidentiality and privacy of patients' information.
- 3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.
- 3.7. Recognize and manage conflicts of interest.
- 3.8. Refer patients to the appropriate health facility at the appropriate stage;
- 3.9. Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety.

Competency Area IV: The graduate as a scholar and scientist

The graduate should be able to:

- 4.5. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).
- 4.7. Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.
- 4.8. Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

Competency area V: The graduate as a member of the health team and part of the health care system.

The graduate should be able to:

- 5.1. Recognize the important role played by other health care professionals in patients' management.
- 5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient Management.
- 5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.
- 5.4. Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.
- 5.5. Communicate effectively using written health records, electronic medical records, or other digital technology.
- 5.6. Evaluate his/her work and that of others using constructive feedback.



- 5.7. Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.
- 5.9. Use health informatics to improve the quality of patient care.
- 5.10. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.
- 5.12. Demonstrate accountability to patients, society, and the profession.

Competency Area VI: The graduate as a lifelong learner and researcher.

The graduate should be able to:

- 6.1. Regularly reflect on and assess his/her performance using various performance indicators and information sources.
- 6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.
- 6.3. Identify opportunities and use various resources for learning.
- 6.4. Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.
- 6.6. Effectively manage learning time and resources and set priorities.
- 6.8. Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability.
- 6.10. Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry.



3-Intended Learning outcomes of course

Each competency will be broken down into one or more learning outcomes that may be Knowledge and understanding (K), Skills (practical/clinical) (S) or Attitudes and behavioral (A) or all.

NARS Key competencies	Learning outcomes for each key competencies	Domain Know, Know how, Show how, Does	Teaching method	Assessment method
1.1. Take and record a structured, patient centered history.	S1. Perform a focused history based on all relevant information (including obtaining data from secondary sources) in the following common clinical problems: <ul style="list-style-type: none"> • Knee problems • Spine problems • Peripheral nerve problems • Hand and tendons injuries • Fractures of long bones and pelvis • Emergency management • Bone tumors • Bone and joint infections 	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
	S2. Document and present the clinical encounter (case) concisely in an oral presentation, as a written document, and entered into an electronic medical record in the following common clinical problems: -Clinical problems Mentioned in S1.	Show how	Skill lab or bed- side Mini - CEX training OSCE Training	Portfolio OSCE ACC



1.2. Adopt an empathic and holistic approach to the patients and their problems.	K1. A1. Address psychological and social factors when assessing patients and developing care plans in any clinical situations.	Know how	Cases	Quizzes Formative written Final written Portfolio
	- Mentioned in S1 & S10	Show how	Skill lab orbed side Mini - CEX training OSCE training	OSCE ACC
	A2. Interact with patients showing 7 key tips of empathic and holistic approach: <ul style="list-style-type: none"> • Making eye contact • Let your patient know you're listening • Be aware of your body language • Be curious about your patient • Record details that humanize your patient • Show support to your patient • Look deeper for ways to empathize with your patient 	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
	S4. Establish that patients are attentive—eg, by assessing their level of attention while the history is taken or by asking them to immediately repeat 3 words	Show how	Skill lab or bed- side Mini - CEX training OSCE Training	Portfolio OSCE ACC



1.3 Assess the mental state of the patient.	S5. Perform an assessment of vital signs	Show how	Skill lab orbed side Mini - CEX training OSCE Training	Portfolio OSCE ACC
	S6. Perform a detailed physical examination of all body systems	Show how	Skill lab orbed side Mini - CEX training OSCE Training	Portfolio OSCE ACC
1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.	S7. Perform a focused physical examination based on the patient's chief complaint and review of systems in the following common clinical problems: -Mentioned in S1	Show how	Skill lab orbed side Mini - CEX training OSCE Training	Portfolio OSCE OSPE ACC
	S8. Detect all significant abnormal findings on physical examination in the following common clinical problems: • Mentioned in S1 & S7.	Show how	Skill lab orbed side Mini - CEX training OSCE Training	Portfolio OSCE OSPE ACC
	S9. Report findings in notes	Show how	Skill lab orbed side Mini - CEX training OSCE Training	Portfolio OSCE OSPE ACC



1.5. Prioritize issues to be addressed in a patient encounter.	S10. A3. Identify the cultural concerns and goals of patients and their families for a specific encounter during the interaction with a stable patient presenting with one of the following straightforward problems: <ul style="list-style-type: none">• Lumbar disc prolapse• ACL injury• Knee osteoarthritis• DDH, CTEV	Show how	Skill lab orbed side Mini - CEX training OSCE Training	Portfolio OSCE OSPE ACC
1.6. Select the appropriate investigations and interpret their results taking into consideration cost/effectiveness factors.	S11. Select common investigations relevant to the findings on history and physical examination in the following common clinical problems: mentioned in S1 & S10	Know how Show how	Skill lab orbed side Mini - CEX training OSCE Training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
		Know	Lectures	Quizzes
	K3. Describe the purpose of common diagnostic tests, including blood tests, tests of other body fluids, and basic imaging tests relevant to the following common clinical problems: <ul style="list-style-type: none">• Mentioned in S1, S7, S10			Formative written Final written
	S12. Interpret in a simulated case, the results of the following commonly ordered tests. <ul style="list-style-type: none">• Mentioned in S1, S7, S10	Show how	Skill lab orbed side Mini - CEX training OSCE Training	Portfolio OSCE OSPE ACC



1.7. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	K4. & S13. Recognize that there is a degree of uncertainty in all clinical decision making.	Know how Show how	Cases Skill lab or bedside Mini - CEX training OSCE Training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
	K5. & S14. Identify clinical situations in which complexity, uncertainty, and ambiguity may play a role in decision-making. • Mentioned in S1	Know how Show how	Case Skill lab or bedside Mini - CEX training OSCE Training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
1.8. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	K6. Integrate and apply knowledge of foundational Biomedical and clinical topics together with clinical skills to diagnose and address the following common medical problems: Mentioned in S1, S7, S10	Know how	Cases	Quizzes Formative written Final written
	K7. S15. Formulate a broad differential diagnosis for each problem, based on the clinical encounter and investigations done to date in a stable patient presenting with one of the following straightforward problems: • Mentioned in S10	Know Know how Show how	Lecture Case Skill lab or bedside Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC



1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.	K8. S16. Propose a most likely or working diagnosis for each problem based on the clinical encounter and investigations done to date in a stable patient presenting with one of the following straightforward problems: • Mentioned in K7. S15.	Know Know how Show how	Lecture Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
	K9. S17 Formulate a broad differential diagnosis for each problem, based on the clinical encounter and investigations done to date in an emergency or acute illness patient presenting with one of the following: • ATLAS • Fracture management • Bone and joint infections	Know Know how Show how	Lecture Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
1.11. Perform diagnostic and intervention procedures ² in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.	K10. Describe the indications for the following essential medical procedures (diagnostic and intervention), how they are performed, common risks, and follow-up care • Emergency Procedures	Know	Lecture	Quizzes Formative written Final written
	K11. S18.	Know	Lecture	Quizzes



	<p>Implement plans for care prior to any of the following procedures</p> <ul style="list-style-type: none"> Mentioned in S1 	Show how	Skill lab orbed side Mini - CEX training OSCE training	<p>Formative written Final written</p> <p>Portfolio OSCE OSPE ACC</p>
	<p>S19. A4. Perform the following essential medical procedures in a supervised or simulated setting</p> <ul style="list-style-type: none"> Slabs for fractures 	Show how	Skill lab orbed side Mini - CEX training OSCE training	<p>Portfolio OSCE OSPE ACC</p>
	<p>S20. Implement plans following the following procedures, including monitoring for post-procedure complications and intervening effectively for major complications that occur.</p> <p>Assessment of neurovascular bundle</p>	Show how	Skill lab orbed side Mini - CEX training OSCE training	<p>Portfolio OSCE OSPE ACC</p>
1.12. Adopt strategies and	<p>K 12. Recognize examples of patient safety incidents (adverse events, error, near misses, preventable adverse event) in the clinical setting</p> <ul style="list-style-type: none"> Mentioned in S1 	Know Know how	Lecture Case	<p>Quizzes Formative written Final written</p>



apply measures that promote patient safety.	K 13. Differentiate between cases where an adverse event has occurred from those that are due to the underlying medical illness in the following clinical situation. • Bone and joint infections	Know how	Case	Quizzes Formative written Final written
	K 14.	Know how	Case	Quizzes
	Demonstrate disclosure of a simple medical error to a patient or family (e.g., inadvertent cancellation of a test), In the following clinical cases as an example Mentioned in S1			Formative written Final written
	K15. Propose an approach to reducing the frequency of medical error in response to a patient safety using an example Mentioned in S1	Know how	Case	Quizzes Formative written Final written
1.13. Establish patient-centered management plans in partnership with the patient, his/her family and other health	K16. S21. Formulate a broad differential diagnosis for each problem, based on the clinical encounter and investigations done to date in a stable patient presenting with one of the following straightforward problems: • Mentioned in S10	Know	Lecture	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
		Know how	Case	
		Show	Skill lab orbed side Mini - CEX training OSCE training	



professionals as appropriate, using Evidence Based Medicine in management decisions.	K17. S 22. Establish a therapeutic and management plan with appropriate timelines and follow up in a patient presenting with any of one or more of the following acute illnesses and/or complex problems, Mentioned in S1	Know Know how Show	Lecture Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
1.14. Respect patients' rights and involve them and /or their families/careers in management decisions.	A5. Exhibit honesty and integrity with patients, physicians and other health professionals. A6. Demonstrate caring and compassion during all interactions with patients. A7.	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
	Recognize the importance of trusting relationships with patients and others. A8. Recognize and maintain boundaries when interacting with patients. A 9. Demonstrate sensitivity with respect to peers, colleagues, and patients. - As Mentioned in S1 &S10			
	K18. A10. Consistently maintain patient confidentiality in all clinical, social and electronic settings, while recognizing situations that require disclosure of confidential information.	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSPE ACC



	K19. Describe the underlying ethical principles and legal process of informed consent	Know how	Case	Quizzes Formative written Final written
	K20. S23. Describe the process of how to obtain informed consent for a test or treatment procedure	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
1.15. Provide the appropriate care incases of emergency, including cardio-pulmonary resuscitation , immediate life	K21. Describe the characteristics of an acutely ill patient in terms of findings on history, physical examination and basic laboratory investigations in the following clinical situations	Know Know how	Lecture Case	Quizzes Formative written Final written
support measures and basic first aid procedures.	<ul style="list-style-type: none"> ATLAS 			
	K22. S24. Recognize when a patient has abnormal vital signs that requires immediate attention and investigation in the following clinical situations <ul style="list-style-type: none"> ATLAS 	Know Know how Show how	Lecture Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC



	<p>K23. S25. Recognize when a patient has a complaint or physical finding that suggests the possibility of a severe illness (including life- -threatening) and therefore requires immediate attention and investigation in the following clinical situations</p> <ul style="list-style-type: none"> • Mention in K22. S24. 	<p>Know</p> <p>Know</p> <p>how</p> <p>Show</p>	<p>Lecture</p> <p>Case</p> <p>Skill lab orbed side Mini - CEX training OSCE training</p>	<p>Quizzes Formative written Final written</p> <p>Portfolio OSCE OSPE ACC</p>
	<p>K24. Apply the steps taken in the emergency care of acutely ill patients in the following clinical situations</p> <ul style="list-style-type: none"> • Mention in K22. S24. 	<p>Know</p> <p>Know</p> <p>how</p>	<p>Lecture</p> <p>Case</p>	<p>Quizzes Formative written Final written</p>
	<p>K25. S26. Identify potential underlying causes of a patient's deterioration in the following clinical situations</p> <ul style="list-style-type: none"> • Mention in K22. S24. 	<p>Know</p> <p>Know</p> <p>how</p> <p>Show how</p>	<p>Lecture</p> <p>Case</p> <p>Skill lab orbed side Mini - CEX training OSCE training</p>	<p>Quizzes Formative written Final written</p> <p>Portfolio OSCE OSPE ACC</p>
	<p>S27 Start the initial emergency care plan for a patient with the following</p>	<p>Show how</p>	<p>Skill lab orbed side Mini - CEX training</p>	<p>Portfolio OSCE ACC</p>
	<p>common life- threatening conditions</p> <ul style="list-style-type: none"> • Mentioned in K9, S17 		<p>OSCE training</p>	



2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.	K26 Apply preventive measures for the following health problems: <ul style="list-style-type: none"> Joint osteoarthritis Lumbar Disc Disease 	Know Know how	Lecture Case	Quizzes Formative written Final written
2.6 Recognize the epidemiology of common diseases within his/her community, and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.	- K27 Apply methods reducing the incidence and prevalence of following common diseases. -Mention in K26.	Know Know how	Lecture Case	Quizzes Formative written Final written
	- K28 Identify and apply screening tests appropriate at different life stages	Know Know how	Lecture Case	Quizzes Formative written Final written
2.9 Adopt suitable measures for infection control.	- - K28. S28 Apply principles of patient safety related to infection prevention and control practices in the following situations <ul style="list-style-type: none"> Bone and joint infections 	Know Know how Show how	Lecture Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC



	K2, S29. Demonstrate the procedures involved in universal body substance precautions, including handwashing, and donning and doffing of gowns, gloves, masks, and eye protection	Know Know how Show how	Lecture Case Skill lab orbed side Mini - CEX training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
			OSCE training	
	K30. S30. Apply principles of infection control when dealing with a patient who may have a communicable Disease	Know Know how Show how	Lecture Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	- K31. A11. Demonstrate the ability to give feedback to colleagues in a respectful manner.	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
3.3. Respect the different cultural beliefs and values in the community they serve.	-K32. A12. Demonstrate the application of patient autonomy and respect for persons in specific case situations	Show	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC



3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.	- K33. A13. Identify medicolegal principles that obligate physician to Treat all patients equally,	Know Know how Show how	Lecture Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
	- A14. Demonstrate in clinical encounters avoiding stigmatizing any category	Show how	Skill lab orbed side Mini - CEX training	Portfolio OSCE ACC
	regardless of their social, cultural, ethnic backgrounds, or their disabilities.		OSCE training	
3.5. Ensure confidentiality and privacy of patients' information.	- K34. A15. Avoid disclosing confidential patient information in online communications.	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
	- K35. A16. Explain the potential abuses of technology-enabled communication and their relationship to professionalism.	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC



	- K36. A17 Follow relevant policies regarding the appropriate use of electronic medical Records	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.	- K37. A18. Apply basics of medico legal practices in common clinical situations including: • Mentioned in K7. S15.	Know how Show how	Case Skill lab orbed side Mini - CEX training	Quizzes Formative written Final written Portfolio OSCE ACC
			OSCE training	
	- K38. A19. Demonstrate how to avoid common medical errors in the following common clinical situations: • Mentioned in K7. S15.	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC



3.7. Recognize and manage conflicts of interest.	- K39, S31, A20 Demonstrate the capacity to reflect on their own competencies and identify situations where one requires help	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
3.7. Recognize and manage conflicts of interest.	- K40. S32 Demonstrate the capacity to identify situations where cognitive biases may have affected their patient management	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
3.8. Refer patients to appropriate health facility at the appropriate stage.	K41 Describe the nature of clinical expertise and of its limits	Know how	Case	Quizzes Formative written Final written
	K42., S33 Recognize the range of possible transitions a patient may encounter (e.g., hospital to home, hospital to long term care facility, emergency department to ward in the	Know Know how Show how	Lecture Case Skill lab orbed side	Quizzes Formative written Final written Portfolio OSCE
	following clinical settingsexamples • Mentioned in K7. S15.		Mini - CEX training OSCE training	ACC
	- K43. List indications of admissionto hospital in the following clinical situations • Mentioned in K7. S15.	Know Know how	Lecture Case	Quizzes Formative written Final written



	<p>K44. List criteria of home discharge in the following clinical situations</p> <ul style="list-style-type: none"> Mentioned in K7. S15. 	<p>Know</p> <p>Know how</p>	<p>Lecture</p> <p>Case</p>	<p>Quizzes</p> <p>Formative written</p> <p>Final written</p>
	<p>- K45. List the elements of a high quality written “handover of care” Document in the following clinical settings examples Mention in S1</p>	<p>Know</p> <p>Know</p> <p>how</p>	<p>Lecture</p> <p>Case</p>	<p>Quizzes</p> <p>Formative written</p> <p>Final written</p>
	<p>- K46. A21. List the elements of a high-quality verbal and written handover of care in the following clinical settings examples Mention in S1</p>	<p>Know</p> <p>Know how</p> <p>Show how</p>	<p>Lecture</p> <p>Case</p> <p>Skill lab orb ed side Mini - CEX training OSCE training</p>	<p>Quizzes</p> <p>Formative written</p> <p>Final written</p> <p>Portfolio</p> <p>OSCE</p> <p>ACC</p>
<p>3.9. Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients’ safety</p>	<p>- K47. A22. Participate in peer assessment</p>	<p>Know</p> <p>Know how</p> <p>Show how</p>	<p>Lecture</p> <p>Case</p> <p>Skill lab orb ed side Mini - CEX training OSCE training</p>	<p>Quizzes</p> <p>Formative written</p> <p>Final written</p> <p>Portfolio</p> <p>OSCE</p> <p>OSPE</p> <p>ACC</p>
<p>4.5 Identify various causes (genetic,</p>	<p>- K48.</p>	<p>Know</p>	<p>Lecture</p>	<p>Quizzes</p>



developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).	Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of the following diseases mentioned in S1 S10, A3K7, S15	Know how	Case	Formative written Final written
5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.	- K49. A23. Demonstrate respect and cooperation with all health care providers in the following clinical settings mentioned in <ul style="list-style-type: none"> • S1 • S10, A3 • K7, S15 	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts	-K50. Identify clinical scenarios that are likely to lead to conflict - K51. Describe the root causes of conflict in inter- professional teams - K52. Describe approaches to conflict resolution	Know how	Case	Quizzes Formative written Final written



in a manner that supports collaborative work.	<p>- K53. A24. Recognize one's own approach to conflict</p> <p>- K54. , A25 Demonstrate the capacity to resolve conflicts that occur with colleagues related to</p>	<p>Know how</p> <p>Show how</p>	<p>Case</p> <p>Skill lab orbed side Mini - CEX training</p>	<p>Quizzes Formative written Final written Portfolio OSCE OSPE ACC</p>
	issues such as prioritization of duties		OSCE training	
5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.	<p>- K55., A26 Identify aspects of their own leadership style(s) (including, strengths, weaknesses, and biases.</p> <p>- K56., A27. Participate in reflective processes to inform their personal leadership development.</p> <p>- K57., A28. Appreciate that leadership is not demonstrated only by leaders but that all physicians will be required to demonstrate "leadership" in the course of their careers.</p> <p>- K58., A29. Reflect on motivations, capabilities, skills, boundaries, and purpose as a leader.</p> <p>K59., A30. Demonstrate teamwork and collaboration STYLES in the healthcare setting and participate in team-building and collaboration exercises.</p>	<p>Know how</p> <p>Show how</p>	<p>Case</p> <p>Skill lab orbed side Mini - CEX training OSCE training</p>	<p>Quizzes Formative written Final written Portfolio OSCE ACC</p>



<p>5.5 Communicate effectively using a written health record, electronic medical record, or other digital technology.</p>	<p>- A31., S34. Communicate effectively with patients - A32. Communicate with colleagues - A33. S35. Communicate in breaking bad news A34. Communicate with relatives - A35. Communicate with disabled people A36.</p>	<p>Show how</p>	<p>Skill lab orbed side Mini - CEX training OSCE training</p>	<p>Portfolio OSCE ACC</p>
	<p>Communicate in seeking informed consent - S36. , A37 Communicate in writing (including medical records) S37. A38. Communicate in dealing with Aggression</p>			
<p>5.6 Evaluate his/her work and that of others using constructive feedback</p>	<p>A39. Consistently seek out and welcome feedback from others. - A40. Accept constructive feedback. A41., S38 Demonstrate the capacity to reflect upon feedback and use this as a basis for enhanced learning of relevant competencies. A42., S39. Provide constructive feedback to colleagues about aspects of their clinical competence when requested to do so.</p>	<p>Show how</p>	<p>Skill lab orbed side Mini - CEX training OSCE training</p>	<p>Portfolio OSCE ACC</p>



5.7 Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.	K60., S40. Shows how to refer to other professionals in the following clinical situations: Mentioned in S1 K61., S41. Shows how to seek further support and advice in the following clinical situations mentioned in • K60. S40.	Know how Show how	Case Skill lab orbbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
5.9 Use health informatics to improve the quality of patient care.	S42. Use information and communication technologies to enhance knowledge, skills and judgment in providing evidence-informed, safe,	Show how	Skill lab orbbed side Mini - CEX training OSCE training	Portfolio OSCE OSPE ACC
	effective and efficient patient care.			
	S43. Gather relevant data from a variety of sources, including literature, web-based resources, electronic health records and databases.	Show how	Skill lab orbbed side Mini - CEX training OSCE training	Portfolio OSCE OSPE ACC
	K71. S49. K62., S44. Critically assess the reliability, quality and comprehensiveness of all data used to inform health care Decisions.	Know how Show how	Case Skill lab orbbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC



5.10 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.	- K63, S45. Write medical record in the following clinical situations mentioned in: • S1 • S10, A3 • K7, S15	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC
5.12 Demonstrate accountability to patients, society, and the profession.	S46., A43. Reflect on examples from their clinical rotations and acknowledge that near misses, adverse events, and patient safety incidents (PSIs) will occur.	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
6.1 Regularly reflect on and assess his/her performance using various performance indicators and information sources.	S47., A44. Reflect on experiences in the preclinical setting to identify areas requiring improvement a modify behavior. S48., A45. Reflect on experiences in the clinical setting to identify	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
	areas requiring improvement and modify behavior by use of ethical frameworks. S49., A46. Evaluate teachers and programs in an honest, fair, and constructive manner.			
	K64. Use portfolio as a tool to develop and monitor a learning plan.	Know	lecture	Quizzes Formative written Final written



6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	<p>S50., A47. Reflect on achievement of the required competencies.</p> <p>S51., A48. Use portfolio to improve self-awareness to enhance performance.</p> <p>A49. Demonstrate appropriate use and enhancement of resilience skills.</p> <p>S52, A50 Demonstrate the connection between self-care and patient safety.</p>	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
6.3 Identify opportunities and use various resources for learning.	<p>S53 Use various resources of learning including LMS.</p> <p>S54., A51. Contribute to a positive atmosphere in the classroom and in clinical learning settings by demonstrating the following behaviors:</p> <ul style="list-style-type: none"> • Participating enthusiastically as a learner • Providing encouragement to Colleagues 	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE OSPE ACC
	<ul style="list-style-type: none"> • Refraining from belittling colleagues' efforts 			



6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.	K65. Identify the various different collaborators they will work within the clinical environment to provide patient care.	Know how	Case	Quizzes Formative written Final written
	K66., A52. Demonstrate a general understanding of the roles and responsibilities of collaborators in the clinical environment.	Know how Show how	Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE ACC
	S55. Participate in inter-professional activities.	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
6.6 Effectively manage learning time and resources and set priorities.	K67. Describe the concepts of the declared, taught, learned, and hidden Curriculum.	Know Know how	Lecture Case	Quizzes Formative written Final written
	K68. Describe factors that can positively or negatively affect the learning environment.	Know Know how	Lecture Case	Quizzes Formative written Final written
	K69., S56., A53 Develop a systematic approach to learning and a time management strategy.	Know Know howShow how	Lecture Case Skill lab orbed side Mini - CEX training OSCE training	Quizzes Formative written Final written Portfolio OSCE OSPE ACC



	S57., A54. Access supports available to students to deal with stress and the health issues that are common in medical school.	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE OSPE ACC
	K70. a Describe strategies for reporting and managing witnessed or Experienced mistreatment.	Know Know how	Lecture Case	Quizzes Formative written Final written
6.8 Critically appraise research studies and scientific papers interms of integrity, reliability, and applicability.	S58. Select appropriate sources of knowledge as they relate to addressing focused questions. Identify appropriate sources that answer a clinical question.	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
6.10 Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry.	S59. A55 Plan and deliver an effective presentation.	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC
	S60., A56. Explain to patients and families in general terms the results of research studies and their application to clinical issues.	Show how	Skill lab orbed side Mini - CEX training OSCE training	Portfolio OSCE ACC



4-Structure of the Course:-

<i>Week</i>	Lectures (list number)	Practical (list number)	PORTFOLI OTASKS (NUMBER)	CASE BASED Discussions (NUMBER)	Formative Assessment (NUMBER)	Revisions and Exams	Total
1 st	1	1.5	2	1.5			
2 nd	1	1.5	2	1.5	1		
3 rd	1	1.5	2	1.5			
4 th	1	1.5	2	1.5	1		
5 th	1	1.5	2	1.5			
6 th	1	1.5	2	1.5	1		
7 th	1	1.5	2	1.5			
8 th	1	1.5	2	1.5	1		
9 th	1	1.5	2	1.5			
10 th	1	1.5	2	1.5	1		
11 th	1	1.5	2	1.5			
12 th	1	1.5	2	1.5	1		
13 th	1	1.5	2	1.5			
14 th	1	1.5	2	1.5	1		

As regard lecture, practical and case based discussion, Number = contact hours

**5- Course content:-****Lecture Topics and Their Intended Learning Outcomes****(Choose one source for each topic)**

Topics	Learning outcomes K	Lectures Titles	Specified reference (Kaplan Chapter)	Week	Date		Contact Hours
					from	to	
ABCs	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> Introduction to trauma in Orthopedics 	SR-2	1 st			1
Orthopedic emergencies	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> Compartment syndrome Open fractures Dislocations (shoulder, Hip, and elbow) 	SR-2	2 nd			1
Upper Limb trauma	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> Shoulder injuries / Fractures / Arm Injuries / fractures Elbow injuries / fractures / Forearm injuries / fractures 	SR-2	3 rd			1



Lower Limb trauma	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> Femoral fractures (fracture neck of femur – trochanteric fractures – subtrochanteric fractures – Supracondylar fracture) Tibial fractures (tibial plateau fracture)/ankle & foot fractures 	SR-2	4 th and 5 th			2
Hip dislocation and pelvic fractures	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> Hip dislocation Pelvic fractures 	SR-2	6 th			1
Traumatic spinal cord injuries	K1-12, K14-25, K27, K29-70	Traumatic spinal injuries and spinal cord injuries	SR-2	7 th			1
Low Back Pain	K1-12, K14-27, K29-70	Lumbar disc prolapse, Potts disease and related pathologies	SR-2	8 th			1
Sport Knee Injuries	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> Meniscus injuries Ligamentous 	SR-2	9 th			1
Bone Infections	K1-25, K27-70	<ul style="list-style-type: none"> Osteomyelitis – pyogenic arthritis Pott's disease of the spine 	SR-2 + Orthobullet website	10 th			1
Metabolic and degenerative arthritis	K1-12, K14-27, K29-70	<ul style="list-style-type: none"> Osteoarthritis Rheumatoid arthritis Gouty arthritis 	IM-2	11 th			1



Common Hand problems and Obstetric brachial plexus injury	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> • Carpal tunnel syndrome • Common tendon injuries • Associated pathology • Brachial plexus surgical anatomy • Obstetric brachial plexus injury 	SR-2	12th			1
Bone tumors	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> • Benign bone tumors • Malignant bone tumors 	SR-2	13th			1
Pediatric orthopedic conditions	K1-12, K14-25, K27, K29-70	<ul style="list-style-type: none"> • Congenital Talipes Equinovarus • Developmental Dislocated Hip • Septic hip • Knee deformity • 	SR-2	14th and 15th			2

Skills and tasks and Their Intended Learning Outcomes

In addition to real patients and skills stated in the NARS should be learned either in practical or group discussion.

No.	Learning outcomes S and A	Bedside/skill lab sessions and titles	Weeks	Date		Hours
				from	To	

التاريخ : 2022/7/19

إصدار / تعديل (01) -

نموذج رقم SP00QF110001



1.	S1-S13, S15, S16, S18-21. S23, S27, S29-S39, S41 - 60 A1-10,12-A56	History taking	1 st			1.5
2.	S1-S13, S15, S16, S21. S23, S29- 60 A1-21, 23 – 56	Knee examination	2 nd			1.5
3.	S1-S13, S15, S16, S21. S23, S29- 60 A1-21, 23 – 56	Spine examination	3 rd			1.5
4.	S1-S13, S15, S16, S21. S23, S29- 60 A1-21, 23 – 56	Peripheral nerve examination	4 th			1.5
5.	S1- S16, S21. S23, S29- 60 A1-21, 23 – 56	Hand tendon injuries	5 th			1.5
6.	S1-S13, S15-27, S29-60 A1-10,12-A56	Comment in plain x-rays of limbs fractures	6 th			1.5
7.	S1-S13, S15-27, S29-60 A1-10,12-A56	Comment in spine imaging Bone tumors imaging	7 th			1.5
8.	S1-S13, S15-27, S28, S29-60 A1-10,12-A56	Pyogenic arthritis – osteomyelitis – Pott's disease	8 th			1.5



9.	S1-S13, S15-27, S29-60 A1-10,12-A56	CTEV DDH	9 th			1.5
10.	S1-S13, S15-27, S29-60 A1-10,12-A56	Bone healing – cast – splint – traction Principles of plate fixation	10 th			1.5
11.	S1-S13, S15-27, S29-60 A1-10,12-A56	Principles of Intramedullary nail and plates fixation	11 th			1.5
12.	S1-S13, S15-27, S29-60 A1-10,12-A56	Arthroplasty principles Orthopedic instruments	12 th			1.5
13.	S1-S13, S15-27, S29-60 A1-10,12-A56	Common clinical cases	13 th			1.5
14.	S1-S13, S15-27, S29-60 A1-10,12-A56	Common clinical cases	14 th			1.5
		Total				21

*Date is recorded in the timetable

Self-Directed Learning and Group Discussion (SDL & GD)

(Cases scenario with 10 MCQs) In addition to real patients

	Learning		Date*	Hours
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No.	outcomes (K and A)	Title of cases and reference	Weeks	from	to	
1.	K1-4, K6-7, K11, K14, K22- 27, K49 – K70 A1-65	ACL + MM Injury	1 st 2 nd			3
2.	K1-4, K6-7, K11, K14, K22- 27, K49 – K70 A1-65	Knee osteoarthritis + malalignment	3 rd 4 th			3
3.	K1-4, K6-7, K11, K14, K22- 27, K49 – K70 A1-65	Peripheral nerve injury	5 th 6 th			3
4.	K1-4, K6-7, K11, K14, K22-27, K49 – K70	Hand tendon injuries//Ilizarov device uses	7 th 8 th			3
5.	K1-4, K6-7, K11, K14, K22-27, K49 – K70 A1-65	Lumbar disc prolapse	9 th 10 th			3
6.	K1-4, K6-7, K11, K14, K22- 27, K49 – K70 A1-65	Bone and joint infection	11 th 12 th			3
7.	K1-4, K6-7, K11, K14, K22-27, K49 – K70 A1-65	CTEV + DDH	13 th 14 th			3
Total						21

*Date is recorded in the timetable



Portfolio

No.	Week number	Task to be recorded in the portfolio	Quiz Case Based MCQs	Formative assessment
1.	1 st	<ul style="list-style-type: none">History takingACL + MM Injury	Answer the quiz of each lecture in this week (e-Learning).	
2.	2 nd	<ul style="list-style-type: none">Knee examinationACL + MM Injury	Answer the quiz of each lecture in this week (e-learning).	Attend and pass the formative exam at the end of the week
3.	3 rd	<ul style="list-style-type: none">Spine examinationKnee osteoarthritis + malalignment	Answer the quiz of each lecture in this week (e-learning).	
4.	4 th	<ul style="list-style-type: none">Peripheral nerve examinationKnee osteoarthritis + malalignment	Answer the quiz of each lecture in this week (e-learning).	Attend and pass the formative exam at the end of the week
5.	5 th	<ul style="list-style-type: none">Hand tendon injuriesPeripheral nerve injuryIlizarov device uses	Answer the quiz of each lecture in this week (e-learning).	
6.	6 th	<ul style="list-style-type: none">Comment in plain x-rays of limbs fracturesPeripheral nerve injury	Answer the quiz of each lecture in this week (e-learning).	Attend and pass the formative exam at the end of the week
7.	7 th	<ul style="list-style-type: none">Comment in spine imaging Bone tumors imagingHand tendon injuries	Answer the quiz of each lecture in this week (e-learning).	



8.	8 th	<ul style="list-style-type: none"> Pyogenic arthritis – osteomyelitis – Pott's disease Hand tendon injuries 	Answer the quiz of each lecture in this week (e-learning).	Attend and pass the formative exam at the end of the week
9.	9 th	<ul style="list-style-type: none"> CTEV DDH Lumbar disc prolapse 	Answer the quiz of each lecture in this week (e-learning).	
10.	10 th	<ul style="list-style-type: none"> Bone healing – cast – splint – traction Principles of plate fixation Lumbar disc prolapse 	Answer the quiz of each lecture in this week (e-learning).	Attend and pass the formative exam at the end of the week
11.	11 th	<ul style="list-style-type: none"> Principles of Intramedullary nail and plates fixation Bone and joint infection 	Answer the quiz of each lecture in this week (e-learning).	
12.	12 th	<ul style="list-style-type: none"> Arthroplasty principles Orthopedic instruments Bone and joint infection 	Answer the quiz of each lecture in this week (e-learning).	Attend and pass the formative exam at the end of the week
13.	13 th	<ul style="list-style-type: none"> Common clinical cases CTEV + DDH 	Answer the quiz of each lecture in this week (e-learning).	
14.	14 th	<ul style="list-style-type: none"> Common clinical cases CTEV + DDH 	Answer the quiz of each lecture in this week (e-learning).	Attend and pass the formative exam at the end of the week
	Total	28		

6- Teaching and learning methods:-

- 6.1 Lectures for knowledge outcomes:- Interactive face to face & online Lectures.
- 6.2 Practical (Bedside/skill lab) sessions to gain clinical skills.
- 6.3 Task based log (may use incision academy/clinical key cases).
- 6.4 Group discussions (Case – based).



7- Student assessment methods:-

I- Formative assessment:-

- This is used to monitor student's learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning. It's given once weekly and the answers are presented and discussed immediately with you after the assessment.
- MCQ – Debrief.

II- Summative assessment:-

It is used to evaluate student's achievements at the end of an instructional unit. The grades tell whether the student achieved the learning goal or not.

Blueprint

Lectures Titles	Week	Marks	
		End of block 22	Final 44
<ul style="list-style-type: none"> • Introduction to trauma in Orthopedic 	1 st	3	4
Compartmentsyndrome/ Open fractures <ul style="list-style-type: none"> • Dislocations (shoulder, Hip,and elbow) 	2 nd	3	
<ul style="list-style-type: none"> • Shoulder injuries / Fractures / • Arm Injuries /fractures • Elbow injuries /fractures / • Forearm injuries /fractures 	3 rd	4	8
<ul style="list-style-type: none"> • Femoral fractures(fracture neck of femur – trochanteric fractures – subtrochanteric fractures – Supracondylar fracture) • Tibial fractures (tibial plateau fracture)/ankle &foot fractures 	4 th and 5 th	6	
<ul style="list-style-type: none"> • Pelvic fractures • Ilizarov 	6 th	3	2
Traumatic spinal injuries and spinal cord injuries	7 th	3	2



Lumbar disc prolapse, Potts disease and related pathologies	8 th	0	4
Knee injuries -Meniscus injuries Ligamentous	9th	0	4
Osteomyelitis – pyogenic arthritis	10th	0	4
Osteoarthritis Rheumatoid arthritis Gouty arthritis	11th	0	4
Carpal tunnel syndrome Common tendon injuries Brachial plexus surgical anatomy Obstetric brachial plexus injury	12th	0	4
Benign bone tumors Malignant bone tumors	13th	0	4
Congenital Talipes Equinovarus Developmental Dislocated Hip Septic hip Knee deformity Ilizarov	14th	0	4

**Weighting of assessments:-**

The student's performance will be assessed according to the following:-

Assessment task	Type of assessment	Proportion of total assessment	
		Percentage	Marks
End block exam	case based MCQ (single answer)	20%	22
Portfolio	Case presentation, May include incision academy certificates	10%	11
Final written exam	MCQ (single correct answer)	40% clinical	44
OSCE Final	Typical OSCE stations using standardized, real or skill lab encounters	30%	33
Total		100%	110

8- List of References:-

1- Course notes:-Lectures notes.

2- Essential books (text books):-

- Kaplan USMLE (2019) Surgery.
- Campell"s Operative Orthopedic.

- Eltorai, A. E. M., Eberson, C. P., & Daniels, A. H. (2018). Essential Orthopedic Review: Questions and Answers for Senior Medical Students. In Essential Orthopedic Review: Questions and Answers for Senior Medical Students.

<https://doi.org/10.1007/978-3-319-78387-1>

3- Recommended books:-

- Case Competencies in Orthopaedics.
- Comprehensive Board Review in Orthopaedic Surgery.

4- Periodicals, Web sites, etc.

- British bone and joint Journal
- American bone and joint Journal
- Journal of Clinical Orthopedics



9- Facilities Required for Teaching and Learning:-

1. Lecture halls.
2. Medical Wards and clinical teaching rooms, operating theatres, outpatient clinics and casualty in emergency hospital.
3. Data show and PC with windows as an operating system and office.
4. Skill labs.
5. Software: Moodle and Microsoft teams.

10-Block evaluation:-

- Students' results.
- Students' feedback.
- Tutors' feedback.