

Course Specifications

Course Title:	Oncology and Orthopedics
Course Code:	1000-301(CRN: 15592 & 15599)
Program:	MBBS
Department:	Surgery
College:	College of Medicine
Institution:	King Faisal University

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A. Course Identification

1. Credit hours: 06			
2. Course type			
a.	University <input type="checkbox"/>	College <input checked="" type="checkbox"/>	Department <input type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	
3. Level/year at which this course is offered: Third Year MBBS			
4. Pre-requisites for this course (if any): Pass Block 2.1 of 2 nd year MBBS			
5. Co-requisites for this course (if any): Pass professional development & progress test of third year MBBS			

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	300	100
2	Blended	00	--
3	E-learning	00	--
4	Correspondence	00	--
5	Other	00	--

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	44
2	Laboratory/Studio	51
3	Tutorial	00
4	Others (specify)	00
	Total	95
Other Learning Hours*		
1	Study (Self-directed learning)	205
2	Assignments	00
3	Library	00
4	Projects/Research Essays/Theses	00
5	Others (specify)	00
	Total	205

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

Deliver knowledge and apply information regarding general oncology (detection, diagnosis, treatment modalities, impact, consequences, screening and follow-up, plus hemato-oncology), basic biology of bone, principles of fracture fixation, drugs acting on bone metabolism, rehabilitation medicine, bone infection, osteoporosis, and other bone and joint disorders.

2. Course Main Objective

To deliver knowledge and apply information regarding general oncology (detection, diagnosis, treatment modalities, impact, consequences, screening and follow-up, hemato-oncology).

To deliver the knowledge and information regarding the congenital and developmental musculoskeletal disorders, sports injuries, rehabilitation medicine, bone infection, osteoporosis, and other bone and joint disorders.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Describe the normal/disturbed structural and biochemical properties of abnormal cell division cycle leading to cancers, oncogenetics, malignancies of epithelial, connective, bones, cartilage, muscles, nervous), organs (skin, breast, colon, uterus) and system (skeleton and classification of joints).	K1
1.2	Recite the basic biological and physiological processes and their dysregulation related to the musculoskeletal system development, basic bone biology, growth and disorders affecting musculoskeletal system, drugs affecting the bone metabolism	K1, K2
1.3	Describe the principles of fracture fixation and rehabilitation i.e. mechanisms of bone fractures, their types and classification, healing process of fractures and possible complications of fractures and management.	K1, K2, K3
2	Skills :	
2.1	Analyze health problems in a systemic manner utilizing: Outlines of the scientific history of medicine, Problem solving models and decision theory.	S1, S3
2.2	Take medical history effectively and efficiently and learns skills to perform clinical examination.	S3
2.3	Learn to draft a plan for diagnosis and/or treatment: Recognize the main therapeutic issues such as: Various types of care such as curative, symptomatic, rehabilitative, palliative, and preventive care.	S2, S3
2.4	Write prescription considering the following: Selection of medication (considering age, sex and patient's environmental factors, pregnancy if applicable, patient acceptance, contraindications, interactions, side effects, the risk of medicalization), The administration method, doses, intervals between doses, and duration of therapy	S3
2.5	Emphasize the general foundation of medical ethics. The peculiar Islamic and cultural ethical views in Saudi Arabia (in treating cancer patients).	S1
2.6	Follow legal concepts in healthcare and apply these in practice. The opinion and consents of the patient	S4
3	Competence:	
3.1	Collect, interpret, document, and communicate both complete and focused general & local physical examination including mental status examination where appropriate.	C1

CLOs		Aligned PLOs
3.2	Perform the needed basic skills for diagnostic and therapeutic procedures: Evaluating the results of elementary laboratory testing.	C2
3.3	Recognize airway obstruction and/or circulatory arrest and perform resuscitation in line with a specified protocol of basic life support (BLS)	C2

C. Course Content

No	List of Topics	Contact Hours
1	Oncology (detection & diagnosis)	15
2	Oncology (treatment)	14
3	Oncology (screening & follow-up)	14
4	Oncology (impact & consequences)	12
5	Oncology (hematological malignancies)	14
6	Orthopedics (Basic Bone Biology)	2
7	Orthopedics (Principles of fracture fixation)	8
8	Orthopedic infections	2
8	Orthopedics (Metabolic bone disorders & drugs acting on bone metabolism)	8
9	Orthopedic oncology	2
9	Orthopedics (Rehabilitation Medicine)	2
10	Law & Professionalism	2
11	PBLS, Midblock & Final exams	7
Total (Excluding Exams)		95

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Describe the normal/disturbed structural and biochemical properties of: Abnormal cell division cycle leading to cancers, Oncogenetics, Malignancies of epithelial, connective, bones, cartilage, muscles, nervous), organs (skin, breast, colon, uterus) and system (skeleton and classification of joints).	Theme lecture (online) and practical (Onsite)+ SDL	MCQ
1.2	Explain the basic biological and physiological processes and their dysregulation related to: Musculoskeletal system development, basic bone biology, growth and disorders affecting musculoskeletal system, drugs affecting the bone metabolism	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
1.3	Describe the principles of fracture fixation and Rehabilitation: Mechanisms of bone fractures, their types and classification, healing process of fractures and possible complications of fractures and management.	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
2.0	Skills		
2.1	Analyze health problems in a systemic manner utilizing: Outlines of the scientific history of medicine, Problem solving models and decision theory.	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.2	Take medical history effectively and efficiently and learns skills to perform clinical examination.	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
2.3	Perform to draft a plan for diagnosis and/or treatment: Recognize the main therapeutic issues such as: Various types of care such as curative, symptomatic, rehabilitative, palliative, and preventive care.	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
2.4	Write prescription considering the following: Selection of medication (considering age, sex and patient's environmental factors, pregnancy if applicable, patient acceptance, contraindications, interactions, side effects, the risk of medicalization), The administration method, doses, intervals between doses, and duration of therapy	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
2.5	Apply the general foundation of medical ethics. The peculiar Islamic and cultural ethical views in Saudi Arabia (in treating cancer patients).	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
2.6	Follow legal concepts in healthcare and apply these in practice. The opinion and consents of the patient	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
3.0	Competence		
3.1	Show how to collect, interpret, document, and communicate both complete and focused general & local physical examination including mental status examination where appropriate.	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
3.2	Perform the needed basic skills for diagnostic and therapeutic procedures: Evaluating the results of elementary laboratory testing.	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ
3.3	Recognize airway obstruction and/or circulatory arrest and perform resuscitation in line with a specified protocol of basic life support (BLS)	Theme lecture (Online) and practical (Onsite)+ SDL	MCQ

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Mid-block exam	Sixth	20
2	Final written assessment	Ninth	40
3	Tutor group meetings (Onsite)	Weekly	10
4	Practical workshops (Onsite)	Weekly	20
5	PBLs (Onsite)	Fifth & Sixth	10

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

- Each faculty and teaching staff has his/her own office hours which are known to the students for individual consultations and academic advice.

- Arrangement with meetings of some student groups with certain faculty and teaching staff to clarify points which need further explanations.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<p>List Required Textbooks</p> <ul style="list-style-type: none"> - J. de Vries. <i>Essential Oncology for Health Professionals</i>, 2nd edition, 2009. - Graham G Dark. <i>Oncology at a Glance</i>. Wiley: 1st edition, 2013. - Ashley Blom Ed. <i>Apley & Solmon's: System of Orthopedics and Trauma: Essential Orthopedics and Trauma</i>, 10th edition. 2018 - Parveen Kumar, Michael Clark Ed. <i>Kumar & Clark's Clinical Medicine</i>, 8th edition, 2012. - Robbins: <i>Basic Pathology</i>, 10th edition. Elsevier: 2017. - <i>Oxford Handbook of Clinical Rehabilitation</i>, 2nd edition, 2009.
Essential References Materials	Lecture Notes
Electronic Materials	<p>British National Formulary, 63rd edition, 2012.</p> <ul style="list-style-type: none"> - Singer: <i>The Cambridge Textbook of Bioethics</i>, 2008. - Jorde: <i>Medical Genetics</i>, 4th edition, 2009.
Other Learning Materials	<p>*Computer-based programs/CD, professional standards or regulations and software.</p> <p>*SPSS for windows</p>

2. Facilities Required

Item	Resources
<p>Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p>	<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> - Lecture are conducted online through the Blackboard block 3.1. - Labs availability and facilities were adequate and satisfactory for the onsite teaching. - Sufficient facilities in the computer labs.
<p>Technology Resources (AV, data show, Smart Board, software, etc.)</p>	Satisfactory but needs to be updated like SPSS latest version and Blackboard may be used
<p>Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p>	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Strategies for Obtaining Student Feedback on Effectiveness of Teaching	Students	Student feedback was regularly obtained for the theme lectures, tutor and mentor group sessions, and exams.
Other Strategies for Evaluation of Teaching	Instructors and the department	Electronic feedback for evaluation of the program/instructor was also performed by the students
Processes for Improvement of Teaching	Faculty	*The theme lectures were sent to the block educationalist to give advices about the preparation of the lecture. * Workshops were done by the Faculty Development Committee in the College to the faculty of lower performance
Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)	Producers	Marks checked by an independent teaching staff in the college
Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.		*Student feedback regarding the lectures, tutor sessions, mentor sessions, practical and exams. *Feedback of the teaching staff and faculty regarding the implementation of the course. *Only the College staff will conduct the theme lectures, and the role MOH visitors will be conduction of the patient lectures. *To add some more workshops to refresh the basic knowledge of the students. *Revised the student book and the tutor manual, and mentor manual.
Course content and course conduct	Students	Online course evaluation survey
Written assessment	Peer review	Review of questions

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	College Council
Reference No.	2
Date	September 24, 2019