

نموذج توصيف مقرر
Course Description Form

Name of College\Faculty : Science
Name of Department: Biological Sciences.

اسم الكلية:
اسم القسم العلمي:

Course Name	Molecular Basis of Cancer	اسم المقرر
Course No.	0497405	رقم المقرر
No. of Credits	3	عدد الوحدات
Theoretical Hours	3	عدد الساعات النظرية
Practical Hours	0	عدد الساعات العملية
Course topics		مواضيع المقرر
1. Basic facts about Cancer 2. Classification and Development of Neoplasms 3. Epidemiology of Cancer 4. Inherited Susceptibility to Cancer 5. Cell Growth and Differentiation 6. Differences between Cancer Cells and Normal Cells 7. Molecular Mechanisms of Mutagenesis and Multistage Carcinogenesis 8. Viruses, Cancers and Aids 9. Oncogenes 10. Growth factors, signal transduction and malignancy 11. Tumor Suppressor Genes.		
Text book: (Name, Author , Year , Publisher)		عنوان الكتاب : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)
1. Lewis Kleinsmith, 2013. Principles of Cancer Biology: New International Edition. Pearson, UK		
References: (Name , Author , Year . Publisher)		عنوان المرجع : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)
1. Robert A. Weinberg, 2013. The Biology of Cancer. 2 nd edition. Garland Science, USA		

Prerequisites			متطلبات المقرر		
Grading	Exams	40	%		الاختبارات
	Quizzes	10	%		امتحانات قصيرة
	H.W.		%		واجبات
	Project (field study)	5	%		مشاريع (دراسة ميدانية)
	Final	45	%		الاختبار النهائي
			%		

أهداف مخرجات المقرر :					
الرقم	أهداف مخرجات المقرر :		أمثله من المقرر لتحقيق هذه الأهداف		المستوى المطلوب من عضو هيئة التدريس لتحقيق الهدف :
					منخفض
					متوسط
					عالي
1					
2					
3					
4					
5					
					الحقول
					المهارات
					منسق المقرر (اسم عضو هيئة التدريس المشرف على توصيف المقرر ، توقيعه ، الختم و الرتبة الأكاديمية)
					تاريخ إعداد النموذج
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Course objectives					
No.	Course Objectives (Learning Outcomes)	Example(s) of relevant (Topics and activities)	Recommended Level to satisfy the objectives		
			High	Medium	Low
1	Define cancer, understand cancer epidemiology, identify cancer risk factors.	Differentiate between normal and cancer cells and tissues at the molecular and cellular levels.		X	
2	Explain the multi-step model of cancer (initiation, promotion,	Identify key points in the cell cycle and how normal	X		



	progression), and describe how it is related to invasion and metastasis	cells are driven to cancerous transformation by oncogenes and prevented from it by tumor suppressor genes.			
3	Learn about oncogenes and tumor suppressor genes	how to classify them, what are the mechanisms by which they arise or inhibited.	X		
4	Outline the molecular pathways that are involved in invasion and metastasis	Identify involved main pathways and mesenchymal cells (fibroblasts, macrophages..etc) in the process.	X		
5	Describe different ways to treat cancer and the difference between modern targeted therapy and traditional therapy.	Evaluate how the in-depth knowledge of cancer can be utilized in targeted modern cancer therapy.		X	
Fields	Molecular biology, Oncology, cell biology, signal transduction, genetics				
Skills	To describe complex mechanisms and pathways by which normal cells transform to cancer.				
Coordinator (Name and Rank) :	Dr. Maryam Alrashid				
Signature and stamp :					
Date:	4\11 \2025				