

جامعة : المنصورة

كلية : العلوم

قسم / الفيزياء

توصيف مقرر دراسي

١- بيانات المقرر		
الرمز الكود: ف ح ٢١١	اسم المقرر: General Biophysics	المستوى : الثاني
البرنامج : الكيمياء	عدد الوحدات الدراسية: ٢ نظري : ٢ تمارين: ١ عملي: ٠	

٢- هدف المقرر:	
For students undertaking this course, the aims are to: 1 - Introduce the principles of physical science, in order to understand the behavior and function of living matter. 2 - Outline the basic information of biological context and physical nature of his subject.	
٣- المستهدف من التدريس المقرر:	
a- Knowledge and Understanding : a - 1 - Define some biophysical behaviors. a - 2 - Acquire an understanding of some devices used to measure biophysical behaviors On completing this course, students will be able to:	أ-المعلومات والمفاهيم:
b- Intellectual Skills: On completing this course, students will b - 1 - Distinguish different techniques to measure many physical properties b - 2 - Distinguish different techniques to measure many physical properties b - 3 - Predict the nature of biological phenomena. be able to:	ب-المهارات الذهنية
c-Professional and Practical Skills: On completing this course, students will be able to:	ج- المهارات المهنية الخاصة بالمقرر:

c - 1 - Choose and classify the types of biophysical systems. c - 2 - Differentiate between physical and biophysical system. c - 3 - Compare between different diagrams of biological phenomena.			
d-General and Transferable Skills: On completing this course, d - 1 - Solve the problems using computer. d - 2 - Collect and analyze the database of information related to different subjects. d - 3 - Think critically by solving different biophysical problems. d - 4 - Search for information about the vector representations to model a physical problem in biophysical form. d - 5 - Collect and analyze the data using the internet. students will be able to:			د- المهارات العامة :
1- The action potential. 2- The flow of blood in the circulatory system 3- Membranes. 4- Biomolecules 5- Biological function 6- Physics of living systems			٤- محتوى المقرر:
1 - Lectures using data show and board 2 - Home works, reports and discussion groups			٥- أساليب التعليم والتعلم:
The same as normal students, only skeletal disabilities are allowed in the Faculty of Science.			٦- أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة:
			٧- تقويم الطلاب :
7- Student Assessment Methods			أ- الأساليب المستخدمة :
Final exam	to assess	a1 , b1 - b5 , c1	

Oral exam	to assess	a2 , b1-b3, d1-d2		
Mid-term exam	To assess	b1 , a1-a2 , d1-d4		
Assessment Schedule				ب- التوقيت :
Assessment 1	Week #final exam	Week 14		
Assessment 2	Week #oral exam	Week 14		
Assessment 3	Week #mid-term exam	Week 8		
<i>Weighting of Assessments</i>				ج- توزيع الدرجات :
	Final-Term Examination	80%		
	Oral Examination	10%		
	Practical Examination	0%		
	Semester work	0%		
	Mid-term examination	10%		
	Other types of assessment	0%		
	Total	100%		
٨- قائمة الكتب الدراسية والمراجع :				
1 - Department Notes on " Introduction of biophysics "				أ- مذكرات:
1 - Text Books of Biophysics				ب- كتب ملزمة
				ج- كتب مقترحة :
				د- دوريات علمية أو نشرات..

مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي

المحتويات المقرر	أسبوع الدراسة	المعارف الرئيسية	مهارات ذهنية	مهارات مهنية	مهارات عامة
Physics of living systems	1-3	a1	b1	c1	d1
Biological function.	3-4	a2	b2		d1,d2
Biomolecules	5-8	a1,a2	b3	c2	d3
Membranes.	9-12	a1	b1		
The flow of blood in the circulatory system	13-14	a1,a2	b1,b3	c2,c3	d5

أستاذ المادة : د/ هانى كمال عبد السميع السيد

رئيس مجلس القسم العلمي : أ.د / .المتولى محمود عبد الرازق