

توصيف مقرر دراسي

جامعة : المنصورة

كلية : العلوم

قسم : الرياضيات

١- بيانات المقرر		
المستوى: الثاني	اسم المقرر : Introduction to Statistics & Probabilities	كود المادة : Math 231
عدد الوحدات الدراسية: ٣ ساعة معتمدة نظري ٢: تمارين: ٢ عملي: ٠		التخصص : رياضيات

٢- هدف المقرر :	For students undertaking this course, the aims are to:
	1- Provide students by basic concepts of statistics and probability. Namely: <ul style="list-style-type: none"> ▪ displaying the data, measures of central tendency, measures of dispersion, simple regression, probability, types of random variables and some discrete probability distributions .

٣- المستهدف من تدريس المقرر

أ- المعلومات و المفاهيم :	a- Knowledge and Understanding
	On completing the course students will be able to:
	a1- recognize different types of data
	a2 – acquire the measures of central tendency, dispersion and correlation
	a3 - understand the basic concepts of probability, conditional probability and the related laws
	a4- explain different types of random variables
	a5- identify the probability function, moments, and moment generating function of a random variable
	a6- be aware of the properties of cumulative distribution function.

ب- المهارات الذهنية :	b- Intellectual Skills
	On completing the course students will be able to:
	b1. differentiate between different types of data
	b2- distinguish between the central tendency and dispersion criteria
	b3- distinguish between the discrete and continuous random variables

2- Final exam	week	15	
3- Mid-Term Examination	week	7	
- Mid-Term Examination	10 %		ج- توزيع الدرجات
- Final-Term Examination	80%		
- Oral Examination	10%		
- Practical Examination	0%		
- Semester work	0%		
- Other types of assessment	0%		
		Total 100%	
٨- قائمة الكتب الدراسية و المراجع :			
Department notes in			أ- المذكرات
Theory and problems in statistic (Schaum series)			ب- الكتب ملزمة
Introduction to mathematical statistics (Erwin Kreyszing)			ج- كتب مقترحة
http://en.wikipedia.org/wiki/Dynamics			د- دوريات علمية أو نشرات

أ) مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي

المحتويات للمقرر	اسبوع الدراسة	المعارف الرئيسية	مهارات ذهنية	مهارات مهنية	مهارات عامة
Descriptive statistics	1	a1	b1	c1	d1
Measure of central tendency	2-3	a2	b2	c2	d1, d3
Measures of dispersion	4-5	a2	b2	c2	d1, d3
Elementary probability, combinatorial analysis, conditional probability, independence and Bayes formula	6-8	a3, a4	b3	c3	d1, d3
Random variables, probability distribution, and moments of random variables	9-10	a4-a5	b4	c3	d1, d3
Cumulative distribution function and its properties	11-12	a5	b4		d1, d3
Discrete probability distribution	13-14	a6	b4	c3	d1,d2

أستاذ المادة : أ.د. محمود طه ياسين

رئيس مجلس القسم العلمي : أ.د. مجدى إلياس فارس