Course Description Form

Description of the location

This course description provides a concise summary of the main features of the course and the learning outcomes expected of the student, demonstrating whether the student has made the most of the available learning opportunities. It must be linked to the course .description .The program

Shatt al-Arab University	1 Educational institution .
Computer science	2 Scientific Department / Center .
Principles of Statistics	3 Name/Code of the . headquarters
My presence	4 forms of Available . attendance
First semester/ 2024-2025	5 semester/year .
200	6 Number of study hours (total) .
August 5, 2024	7 Date this description was . prepared

8 Course objectives .

.It gives the student a broader idea of how things can happen .1
.The possibility of things happening allows more room for imagination .2
The moment generating function gives him more opportunity to deal with the .3
.derivative of the moment generating function
,In the next stage, the student will be qualified to deal with probability and statistics .4
.especially in the field of simulation

Course outcomes, teaching, learning and assessment methods .9:

.Understanding the vocabulary of probability and statistics .1

.Understanding the nature of statistics as an integrated knowledge system .2

.Developing statistical concepts among students .3

.Trying to reach the concepts of probability and statistics .4

.Ability to solve complex statistical problems .5

A- Cognitive objectives

Part A - Permutations and Combinations

.Permutations deal with ordered things, but in combinatorics, order is irrelevant

Part B - Probability

Probability is a measure of the likelihood of an event occurring. Probability is measured as a number between zero and one, where zero indicates impossibility and one indicates certainty. The more likely an event is to occur, the more likely it is to .occur

Part C - Distributions

.Continuous and discrete distributions and how to deal with them

B-Skill objectives of the course

1 .Trying to get to the concepts of probability and statistics .

.2 .Ability to solve complex statistical problems

Teaching and learning methods

1- In-person lectures
2- Reports
3- Seminars
4- rapid tests

Evaluation methods

Module Evaluation

evaluation The material Academic

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	2 hours	10% (10)	7	LO # 1- 7
	Final Exam	2 hours	50% (50)	16	All

Total assessment	100% (100 Marks)		

Curriculum plan

	Learning method	Unit name/topic	Required learning outcomes	watches	week
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	- Introduction Permutations and Combinations			the first
	1- In-person lectures 2- Practical laboratory lectures 3- Reports 4- Seminars 5- rapid tests	Possibilities			the second
	1- In-person lectures 2- Practical laboratory lectures 3- Reports 4- Seminars 5- rapid tests	Conditional probability and Bayes ' theorem			the third
	1. In-person lectures 2. Reports 3. Seminars 4. rapid tests	Continuous random variables			Fourth
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	discrete random variables			Fifth
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	functions of random variables			Sixth

	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	Expectations			Seventh
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	discrepancies			The eighth
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	Moment generating function			Ninth
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	Joint and marginal distributions			tenth
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	Discrete distributions			eleventh
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	Connected distributions			twelfth
	exam	First test			thirteenth
	exam	The second test			fourteenth
	1- In-person lectures 2- Reports 3- Seminars 4- rapid tests	Review important topics			fifteenth
	Theoretical lectures	Preparation week before the final exam			sixteenth

Infrastructure .11	
nothing	Required textbooks -1
1. Introduction to Mathematical Statistics book, written by Dr. Sabah Daoud Salim. 2. A Chain of Possibilities by Seymour Lipsch	Main references (sources) -2
	a) Recommended books and ,references (scientific journals (.reports, etc
Adobe reader-[simue - pdf] Probability et statistics course et problems series schaum	,b) Electronic references, websites .etc

Curriculum development plan .12