هيئة تقويم التعليم والتدريب
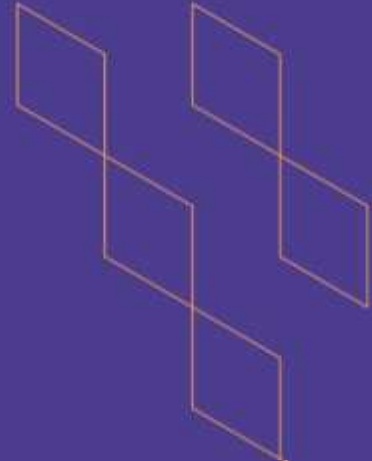Education & Training Evaluation Commission

Course Specification

Course Title: Principles of Statistics

Course Code: BA3205

Program: BA Degree in Business Administration

Department: Business Administration

College: College of Business

Institution: Umm Al-Qura University

Version: 2

Last Revision Date: 28/01/2023

Table of Contents:

A. General information about the course:

Course Identification	
1. Credit hours:	4

2. Course type					
a.	University ☐	College ☐	Department ☒	Track☐	Others☐
b.	Required ☒	Elective☐			

3. Level/year at which this course is offered: Level 2	

4. Course general Description

This course enables the student to clearly understand the statistics basis and encourages him to deal with the fundamentals of statistics as a conceptual and procedural construct in acquiring more statistics concepts

5. Pre-requirements for this course (if any):

6. Co- requirements for this course (if any):

7. Course Main Objective(s)

➤ Construct the frequency distribution table and calculate the relative frequency and percentage Distributions of quantitative data.

➤ Organize and graph the quantitative data.

➤ Distinguish between the three measures of Tendency: Mean, Median and Mode of ungrouped data.

➤ Distinguish between the three measures of Dispersion: range, variance and standard deviation for ungrouped data.

➤ Find mean, variance and standard deviation for grouped data.

➤ Determine the position of a single value in relation to other values in a sample or a population data set.

➤ Determination of marginal and conditional probabilities.

➤ Identifying mutually exclusive, independent and dependent events, as well as complementary events.

➤ Learn basic of probability. In particular, to recognize the following concepts:

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	30	75%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning	10	25%

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	10
5.	Others (specify)	
	Total	40

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Knows the relationship between population and the sample	K1	PowerPoint presentations	Mid Term and final Exams.
1.2	Identifies quantitative and qualitative data types.	K3	Lecture, Discussion	Continuous assessment (short quizzes).

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies		Assessment Methods
1.3	Knows the cumulative frequency distribution and represent its data.	K1	Case study		Exams, Participation
2.0	Skills				
2.1	Calculates the mean and the standard deviation using the random continuous and discrete variable	S1	Lecture, Demonstration, work	Lab Lab	Continuous assessment (short quizzes).
2.2	Calculates the mean of the grouped and ungrouped data	S1	Lecture, Demonstration, work	Lab Lab	Continuous assessment (short quizzes).
2.3	Measures the Dispersion for grouped and ungrouped data	S6	Lecture, Demonstration, work	Lab Lab	Continuous assessment (short quizzes).
2.4	Simplifies problems and analyzes them.	S3	Lecture, Demonstration, work	Lab Lab	Continuous assessment (short quizzes).
2.5	Calculates marginal and Conditional Probability	S6	Lecture, Demonstration, work	Lab Lab	Continuous assessment (short quizzes).
2.6	Organises and represents data quantitatively and quantitatively	S6	Lecture, Demonstration, work	Lab Lab	Continuous assessment (short quizzes).
3.0	Values, autonomy, and responsibility				
3.1	Manage how to work in groups	V2	Divide students in groups and change the leadership of groups each period		Group Presentation Assess each group achievements

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
		V3		Group Presentation
3.2	Self-evaluation and accept criticism from others		Divide students in groups and change the leadership of groups each period	Assess each group achievements
...				

C. Course Content

No	List of Topics	Contact Hours
1	Introduction and basic definitions. Summation notation.	4
2	Frequency & Relative Frequency Dist.	2
3	Organizing and graphing qualitative data & Histograms.	2
4	Cumulative Frequency Distribution.	2
5	Measure of central Tendency.	2
6	Measures of Dispersion for ungrouped data. Mean variance and standard deviation for grouped data.	4
7	Simple Linear Regressions.	4
8	Calculating Probability, Marginal and Conditional Probability. Lesson 10: Mutually Exclusive Events, Independent and Dependent Events, Complementary Events.	4

9	Lesson 16: Intersections of events and Multiplication Rule	4
	Lesson 17: Union of Events and Addition Rule.	
10	Lesson 18: Random Variable, Probability Distribution of Discrete Random Variable.	4
	Lesson 19: Mean, Standard deviation of discrete Random Variable.	
11	Lesson 20: Factorials, Combinations and Permutations.	4
	Lesson 21: Binomial Distributions.	
12	Lesson 22: Continuous Probability Distribution, Normal Distribution.	4
	Lesson 23: Standard Normal Distribution.	
Total		40

D. Students Assessment Activities

NO	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1	Quizz 1	4th	5%
2	Midterm Exam	8th	25%
	Homeworks	Around the semester	20%
3	Quizz 2	10th	5%
4	Final Exam	16th	45%

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Introductory Statistics (Seventh Addition) by Prem S. Mann. Statistics for dummies, 2nd Edition by Deborah Rumsey, Wiley Publishing, Inc.
Supportive References	https://www.khanacademy.org/math/statistics-probability/designing-studies/types-studies-experimental-observational/v/types-of-statistical-studies?modal=1.
Electronic Materials	➤ https://www.alfreed-ph.com/2019/02/Introduction-to-Statistics-pptx.html. ➤ https://www.alfreed-ph.com/2018/03/pdf_13.html. https://www.khanacademy.org/math/statistics-probability
Other Learning Materials	http://en.wikipedia.org/wiki/ Statistics .

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom, lab
Technology equipment (projector, smart board, software)	Data Show, Smart Board , , software
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Chair, Students, External Stakeholders Department and quality committee	Open discussions with the students Anonymous surveys
Effectiveness of students assessment	Chair, Students, External Stakeholders Department and quality committee	Checking marking by the students themselves if it's possible Using the help of other members in reviewing the assignments/exams
Quality of learning resources	Chair, Students, External Stakeholders	Review of course portfolios

Assessment Areas/Issues	Assessor	Assessment Methods
	Department and quality committee	Instructor assessment by students
The extent to which CLOs have been achieved	Chair, Students, External Stakeholders Department and quality committee	Course specifications are periodically reviewed at the departmental level. Courses are updated periodically and compared to the benchmark standards.
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	BA DEPARTMENT
REFERENCE NO.	
DATE	28/01/2023