

Ministry of Higher Education and Scientific Research  
Mustansiriyah University /College of Science  
Department of Mathematic  
(الخطة الدراسية للمساق)



## Course Plan

**Course No.:** 54453253

**Course Name:** Basic in Statistical

**Course Website:**

**Time Division:** 4. hr Theoretical

**Semester & Year:** First, 2022 / 2023

### Course Description:

This subject presents the Frequency distribution table, Frequency histogram, Frequency Polygon, Frequency Curve, Mean, Mode, Median, Harmonic mean, Geometric mean, Quadratic mean, Range, Mean Deviation, Variance, Standard deviation, Standard Score, Coefficient of Variation, Simple correlation coefficient, Spearman correlation coefficient, ...

### Course Intended Outcomes:

The aim of this course is to learn the students the concept Descriptive Statistics and some Basic of Definitions, Measure of central tendency, Measures of Dispersion, correlation concept and the distinction between the simple linear correlation coefficient and the Spearman correlation coefficient importance of arithmetic presentation, the relation between the central tendency, the relation between the Measures of Dispersion.

### Course Outline:

Week	Description depends on the Timing table (Theoretical & Practical)
1	Descriptive statistics and some Basic Definitions
2	Constructing a Frequency Distribution and graphs of Frequency Distribution
3	Measure of central tendency: Sample Mean, Median and Mode
4	Properties of the Measure of central tendency: Mean, Median and Mode
5	The Harmonic Mean, The Geometric Mean,
6	The Quadratic Mean and the relation between the H, G, Q and $\bar{X}$
7	Measures of Dispersion(variation): Range, Mean Deviation
8	Variance and Standard deviation
9	Relative dispersion measures: Standard Score and Coefficient of Variation
10	Moments
11	Skewedness and Measures of Skewedness
12	Kurtosis and Measures of Kurtosis
13	Statistical Parametric and nonparametric tests
14	Z test, T test, $\chi^2$ test, Signal test
15	Krusal-Wallistest and Mann-Whitney test

**Textbooks:**

[1]: Fundamentals of Statistics by H.Mulholl and ,C.R. Jones

**Suggested references:**

[1]: Basic of Statistics by Jarkko Isotalo, Grading:

**Marking:**

First Semester				Final Exam
1st exam	2nd exam	Practical	Activity	
10	10		5	70

Assignment/ Project	Description	Due Date	Marking
test	written exam	1/12/2022	5
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**Instructor(s) information [معلومات الأستاذ]**

Section: (Mathematics) ; Lecture Room:[ 402-203 ], ; Office No.: ( 11 )

Instructor's Name: **Dr. Shurooq Ahmed Kareem**

E-Mail: *shuroq80@uomustansariyah.edu.iq*

Office Hours : Tue.: [ 8 : 30 – 10 : 10 ]

Wed.: [ 8 :30 – 10 : 10 ]

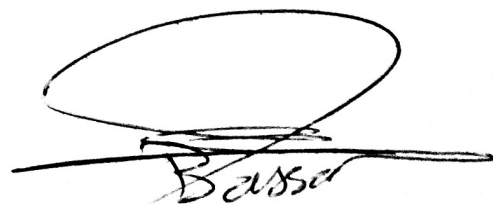
**NOTES:**

-Office Hour: Other office hours are available by appointment.

-The content of this syllabus not be changed during the current semester.



**Lecturer Signature**



**Chairman Signature**