Course Description Form of Principles of Statistics

1. Course Name:
Principles of statistics
2. Course Code:
HOD -1202
3. Semester / Year:
Second semester/ 2024-2025
4. Description Preparation Date:
15/1/2025
5. Available Attendance Forms:
Attending
6. Number of Credit Hours (Total) / Number of Units (Total)
150 hours /6 units
7. Course Administrator's Name (Mention All, If More Than One Name)
Dr. Othman Khalid Alwan **Email : othmanalwan@uodiyala.edu.iq**
8. Course Objectives
Knowledge of the basic concepts associated with statistics, its relationship with other social and human sciences, its functions, and areas of application. Training the student to use available data to describe the phenomenon study. **The ability to statistically analyze phenomena and the extent of the importance of the results (significant or non-significant)**
9. Teaching and learning strategies
A 14-week attendance lectures, interspersed with two monthly exams, daily exams & reports.
10.Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Quick and monthly exams, class activity, reports, and applications for solving exercises	Presentation of the lecture, discussion, and follow-up of the solution steps	Introduction: Getting to know statistics, its functions, types of data, and statistical symbols	Familiarity with the vocabulary and principles of statistics	4	1
Quick and monthly exams, class activity, reports, and applications for solving exercises	Presentation of the lecture, discussion, and follow-up of the solution steps	Data presentation methods: Display metadata tabularly and graphically.	Learn how to display data for each phenomenon	4	2
Quick and monthly exams, class activity, reports, and applications for solving exercises	Presentation of the lecture, discussion, and follow-up of the solution steps	Descriptive statistics measures: (mean, median, mode). (Range, average absolute deviations,.	Knowledge of descriptive statistics measures	4	3
Quick and monthly exams, class activity, reports, and applications for solving exercises	Presentation of the lecture, discussion, and follow-up of the solution steps	Variance and standard deviation (coefficient of relative variation, standard score)	Learn about measures of central tendency	4	4
Quick and monthly exams, class activity, reports, and applications for solving exercises	Presentation of the lecture, discussion, and follow-up of the solution steps	Elementary probability theory	Learn about probability theories	4	5
Quick and monthly exams, class activity, reports, and applications for solving exercises	Presentation of the lecture, discussion, and follow-up of the solution steps	Probabilities and their practical applications of some concepts related to probabilities,	Learn how to apply theories	4	6
Quick and monthly exams, class activity, reports, and applications for solving exercises	Presentation of the lecture, discussion, and follow-up of the solution steps	Discontinuous discrete probability distributions (binomial distribution)	Learn about non-continuous distributions	4	8+ 7

Quick and monthly exams, class activity, reports, and applications for solving exercises	**Presentation of the lecture, discussion, and follow-up of the solution steps**	**Probability distributions Continuous continuous (normal distribution)**	**Learn about non-continuous distributions**	**4**	**10+9**
Quick and monthly exams, class activity, reports, and applications for solving exercises	**Presentation of the lecture, discussion, and follow-up of the solution steps**	**Test of Hypothesis**	**Learn about statistical hypotheses**	**4**	**11**
Quick and monthly exams, class activity, reports, and applications for solving exercises	**Presentation of the lecture, discussion, and follow-up of the solution steps**	**Chi- square distribution x^2**	**Learn about chi-square distribution**	**4**	**1+12 3**
Quick and monthly exams, class activity, reports, and applications for solving exercises	**Presentation of the lecture, discussion, and follow-up of the solution steps**	**Simple regression and correlation:**	**Learn about regression and correlation**	**4**	**14**
Quick and monthly exams, class activity, reports, and applications for solving exercises	**Presentation of the lecture, discussion, and follow-up of the solution steps**	**Using computers to solve statistical problems**	**Learn the programs that are used to solve problems**	**4**	**15**

11. Course Evaluation

12. Learning and Teaching Sources

Required Textbooks (Curricular Books, If Any)	Introduction to Statistics - Written by Dr. Khasha Mahmoud Al-Rawi - University of Mosul - 2000
Main References (Sources)	Electronic References, Websites