Course Description Form

Course Description

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

1- Educational institution	Faculty of Physical Education and Sports Sciences
2- Scientific Department / Center	Branch of Sport Sciences
3- Course Name/Code	Applied Statistics/Second Stage **SESS25F2021**/ SESS25G2021
4- Available attendance forms	In-person/theoretical_practical
5- Semester/year	2024-2025
6- Number of study hours (total)	6 hours per week
7- Date this description was prepared	2024 - 2025

8. Course objectives:

- Students learn the principles of statistics.
- Knowledge of the concepts and laws of statistical principles.
- The possibility of students benefiting from the material in the process of analyzing data that can be used in graduation projects.
- Using statistics to analyze data with the least effort and lowest possible cost.

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

A- Cognitive objectives

A1- At the end of the course, students should be able to state the concepts related to statistics.

disadvantages of each of the statistical components.

A3- At the end of the course, students should be able to mention all the laws related to the application of statistics.

B - Course specific skill objectives: **nothing**

Teaching and learning methods:

Teaching method	Learning method
1- Lecture method	1- Partial method
2- Advanced Lecture Method	2- The holistic method
3- E-learning method	3- Trial and error method

Evaluation methods:

1- Individual assessment

2- Group evaluation

3- Self-assessment

C- Emotional and value goals

1- The curriculum should develop the spirit of perseverance among students.

2- The curriculum should develop the spirit of cooperation among students.

Teaching and learning methods:

1- Guidance programs

3- Specialized courses

Evaluation methods:

1- Value standards

2- Ethical standards

3- Behavioral standards

D - General and transferable skills (other skills related to employability and personal development):

1- The curriculum develops functional skills related to teaching.

10. Course structure:

week	Hours	Required learning	Unit name/topic	Teaching	Evaluation

		outcomes		method	method
1	6 hours	Explain what statistics is and its importance	Introduction and Data Description Introduction to Statistics	Lecture	Group evaluation
2	6 hours	Explain the concept of statistics and how to obtain data	Introduction to Statistics – Preparing Data Files	Lecture	Group evaluation
3	6 hours	**Comprehensive exam and review**			
4	6 hours	Explain how to collect and organize data	Display and organize statistical data	Lecture	Group evaluation
5	6 hours	Explain what frequency distributions are	Frequency distributions (univariate analysis)	Lecture	Group evaluation
6	6 hours	Explain how to represent data graphically.	Graphical representation of frequency distributions	Lecture	Group evaluation
7	6 hours	**First semester theoretical exam1**			
8	6 hours	Explanation of the most important measures of central tendency and dispersion	Measures of central tendency and measures of dispersion	Lecture	Group evaluation
9	6 hours	Explanation of the most important absolute and relative dispersion measures	Dispersion measures	Lecture	Group evaluation
10	6 hours	**Comprehensive review exam**			
11	6 hours	Explanation of measures of skewness and flatness (using the mode, median, and moments method)	Skewness and flatness measures	Lecture	Group evaluation
12	6 hours	Explanation of types of association	Association and types of association	Lecture	Group evaluation
13	6 hours	Explanation of the method of calculating simple correlation (Pearson)	Simple correlation (Pearson)	Lecture	Group evaluation
14	6 hours	Explanation of the method for calculating the rank correlation (Spearman)	Spearman's rank correlation	Lecture	Group evaluation
15	6 hours	**First semester theoretical exam2**			

Mid-year holiday					
16	6 hours	Explain what is meant by the significance test of differences between means	Test of significance of differences between means	Lecture	Group evaluation
17	6 hours	Use of special laws for testing (t)	t-testt) to indicate the differences between the means	Lecture	Group evaluation
18	6 hours	Use the rules for the majesty of differences and for each paragraph	Significance of differences for two unrelated means and two equal samples	Lecture	Group evaluation
19	6 hours	**Comprehensive exam and review**			
20	6 hours	Explaining the concept of analysis of variance, mentioning its most important laws	Analysis of variance (ANOVA	Lecture	Group evaluation
21	6 hours	Explanation of multiple comparison methods	Multiple comparisons	Lecture	Group evaluation
22	6 hours	Explain what the least significant difference method is and how we calculate the value.F	Least significant difference methodLSD)	Lecture	Group evaluation
23	6 hours	**Comprehensive exam and review**			
24	6 hours	**Second semester theoretical exam1**			
25	6 hours	Explanation of test concepts t for Dawtney	a testt for my	Lecture	Group evaluation
26	6 hours	Duncan Test Concepts Explained	Duncan test	Lecture	Group evaluation
27	6 hours	Explain how to test hypotheses for data with independent samples.	Hypothesis tests for independent data for two samples	Lecture	Group evaluation
28	6 hours	Explain the importance of the chi-square test and its use.	chi-square test	Lecture	Group evaluation
29	6 hours	**Second semester theoretical exam2**			
30	6 hours		a test ^{2}X for two workers	Lecture	Group evaluation
11. Infrastructure:					
1- Required textbooks		Statistics / by Dr. Mahmoud Hassan Al-			

	Mashhadani and Amir Hanna Hormuz Introduction to Statistics (by Dr. Khasha' Al-Rawi)
2- Main References (Sources)	Statistics booklet prepared by A. M. Aida Younis Al Murad and A. D. Ziad Yahya Ali
1. Recommended books and references, scientific journals, reports,..... **2. Electronic references, websites**	

12. Curriculum Development Plan
- **Periodic review of the study sites.** - **Diversifying the methods used in the teaching process.**

Subject teachers of Applied Statistics

Second stage / morning and evening study

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