

Biostatistics Course Description (2025-2026)

1. Course Name:	
Biostatistics	
2. Course Code:	
WNR-32-03	
3. Semester / Year:	
Second semester / 3d year	
4. Description Preparation Date:	
15-9- 2025	
5. Available Attendance Forms:	
Spreadsheet	
6. Number of Credit Hours (Total) / Number of Units (Total):	
2 Hours	
7. Course administrator's name (mention all, if more than one name)	
Name: Lect. Hayder Ghaleb Jebur Email: hayder.gh@uowa.edu.iq	
8. Course Objectives	
Course Objectives	- Demonstrate the statistical methods for collecting data, summarization, tabulation, presentation and analysis. - Apply manual calculation for descriptive and inferential tests. - Apply certain statistical program as excel or SPSS which are used for data analysis in computer. - Deal with different data sets such as hospital records.
9. Teaching and Learning Strategies	
Strategy	Lecture Discussion Demonstration Solving Exercises

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	2	The students define biostatistics The student list some areas where biostatistics is important The student discuss importance of biostatistics in research	Introduction	Lecture Discussion	Quiz
Second	2	The student define biostatistics elements The student list source of data required in nursing research	Definitions/ Source Data	Lecture Discussion	Quiz
Third	2	Define quantitative variable Distinguish between countable and measurable variables Distinguish between dependent and independent variables	Variable I(Quantitative)	Lecture Discussion	Quiz
Fourth	2	Define qualitative variable Distinguish between countable and measurable variables Distinguish between dependent and independent variables	Variable II (Qualitative)	Lecture Discussion	Quiz
Fifth	2	Example of nominal scale Example of ordinal scale Example of interval scale Example of ratio scale	Measurement scales	Lecture Discussion	Quiz
Sixth	2	Construct table	Descriptive Statistics I(tables)	Lecture Discussion Exercises solution	Exercises solution
Seventh	2	Construct graphs	Descriptive Statistics II(graphs)	Lecture Discussion	Exercises solution

				Exercises solution	
Eighth	2	Calculate mean List its Find out Median and list its characteristics Find out mood characteristics	Descriptive Statistics III(measurement of central tendency)	Lecture Discussion Exercises solution	Exercises solution Quiz
Ninth	2		Monthly exam		
Tenth	2	Calculate variance of data Calculate standard deviation of data	Descriptive Statistics IV(measurement of dispersion) I	Lecture Discussion Exercises solution	Exercises solution
Eleventh	2	Cohen's d Odds ratios Risk ratios Power analysis	Advanced Tests and Effect Size	Lecture Discussion Exercises solution	Exercises solution
Twelfth	2	Kaplan–Meier curves Hazard rates Time-to-event analysis	Survival Analysis Basics	Lecture Discussion Exercises solution	Exercises solution Quiz
Thirteenth	2	Define hypothesis Construct two main type of hypothesis Define main concept related to testing hypothesis	Test of hypothesis	Lecture Discussion Exercises solution	Exercises solution
Fourteenth	2		Monthly exam		
Fifteenth	2	Define Variable and Entrance Data	Introduction to SPSS	Lecture Discussion Exercises solution Demonstration	Redemonstration

11. Course Evaluation:

Quizzes 10

Assignments 10

Written exam 10

Final exam 70

Total Mark: 100

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

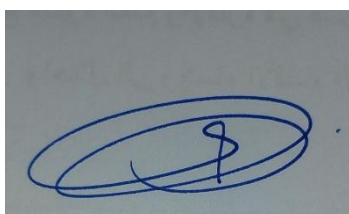
Required textbooks (curricular books, if any)

Lectures

Main references (sources)

Daniel W. Biostatistics A
foundation for analysis In the

	health sciences. 9 th ed. John Wiley & Sons, Inc.2019
Recommended books and references (scientific journals, reports...)	Aljandali A. Quantitative Analysis and IBM SPSS Statistics. Springer International Publishing Switzerland 2016 Salkind N. Statistics for people w (think they) hate statistics. 5th ed. I Angeles: Sage. 2014.
Electronic References, Websites	www.datatab.net



Course administrator
Hayder Ghaleb Jebur



head of the Department
Dr. Murtadha Abbas Abdul-Hamza

