

1. Course Name: <b>Biostatistics</b>	
1. Course Code: WNR-32-03	
2. Semester / Year: Second semester / 3d year	
3. Description Preparation Date: 2025	
4. Available Attendance Forms: Spreadsheet	
5. Number of Credit Hours (Total) / Number of Units (Total): 2 Hours	
6. Course administrator's name (mention all, if more than one name)	
Name: Asst. Lect. Hadi Faiz Jazan Email: hadi.ja@uowa.edu.iq	
7. Course Objectives	
Course Objectives	<ul style="list-style-type: none"> <li>• Demonstrate the statistical methods for collecting data, summarization, tabulation, presentation and analysis.</li> <li>• Apply manual calculation for descriptive and inferential tests.</li> <li>• Apply certain statistical program as excel or SPSS which are used for data analysis in computer.</li> <li>• Deal with different data sets such as hospital records.</li> </ul>
8. Teaching and Learning Strategies	
Strategy	Lecture Discussion Demonstration Solving Exercises
9. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	2	<p>The students define biostatistics</p> <p>The student list some areas where biostatistics is important</p> <p>The student discuss importance of biostatistics in research</p>	Introduction	Lecture Discussion	Quiz
Second	2	<p>The student define biostatistics elements</p> <p>The student list source of data required in nursing research</p>	Definitions/ Source of Data	Lecture Discussion	Quiz
Third	2	<p>Define quantitative variable</p> <p>Distinguish between countable and measurable variables</p> <p>Distinguish between dependent and independent variables</p>	Variable I(Quantitative)	Lecture Discussion	Quiz
Fourth	2	<p>Define qualitative variable</p> <p>Distinguish between countable and measurable variables</p> <p>Distinguish between dependent</p>	Variable II (Qualitative)	Lecture Discussion	Quiz

		and independent variables			
Fifth	2	Example of nominal scale Example of ordinal scale Example of interval scale Example of ratio scale	Measurement scale	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 mode characteristics	Descriptive Statistics III (measurements 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 (measurements of dispersion) I	Lecture Discussion Exercises solution	Exercises solution
Eleventh	2	Calculate coefficient variance of data Calculate coefficient skewness of data	Descriptive Statistics IV (measurements of dispersion) II	Lecture Discussion Exercises solution	Exercises solution
Twelfth	2	Define normal distribution data	Descriptive Statistics V Normal distribution	Lecture Discussion	Exercises solution Quiz

		List normal distribution characteristics		Exercises solution	
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 SP	Lecture Discussion Exercises solution Demonstration	Redemonstration

#### 10. 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

#### 11. 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 <sup>th</sup> 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 who (th they) hate statistics. 5 <sup>th</sup> ed. Los Ange Sage. 2014.
Electronic References, Websites	<a href="http://www.datatab.net">www.datatab.net</a>