



Jordan University of Science and Technology
Faculty of Nursing
Nursing Department

NUR316 Biostatistics

Summer Semester 2019-2020

Course Catalog

3 Credit Hours. Biostatistics NUR 316 introduces selected important topics in biostatistical concepts and reasoning. This course represents an introduction to the field and provides definitions of statistics, biostatistics, data, variable and data types. This course should enable students to differentiate between different types of data, variables, sampling methods, data collection methods. Specific topics include measures of central tendency and variability in data; sampling distribution; methods for performing inference on population means and proportions via sample data; statistical hypothesis testing and its applications; and biomedical indicators. While there are many computational elements to the course, the emphasis is on interpretation and concepts.

Text Book

Title	Biostatistics: A foundation for analysis in the health sciences
Author(s)	Wayne W. Daniel and Chad Lee Cross
Edition	10th Edition
Short Name	Biostatistics
Other Information	

Instructor

Name	Dr. Mohammad Rababa
Office Location	-
Office Hours	Sun : 12:00 - 13:00 Mon : 12:00 - 13:00 Tue : 12:00 - 13:00 Wed : 12:00 - 13:00 Thu : 08:00 - 10:00
Email	mjrababa@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun, Mon, Tue, Wed : 08:30 - 10:00

Room: منصة الكترونية

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Orientation to course	
Week 2	Biostatistics, Data, and Sampling	
Week 3	Descriptive statistics: Measures of central tendency and measures of variability	
Week 4	Descriptive statistics: Graphical method	
Week 5	Normal distribution	
Week 6	Sampling distribution	
Weeks 7, 8	Estimation of population parameters (mean, proportion, difference between two means, and difference between two proportions)	
Week 9	Hypothesis testing: Introduction	
Week 10	Hypothesis testing: One-sample test	
Week 11	Hypothesis testing: Proportion test	
Week 12	Hypothesis testing: Two- sample test (independent samples)	
Week 13	Hypothesis testing: Paired t-test	
Weeks 14, 15	Indicators	
Week 16	Course review and wrap up	

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Differentiate among different types of data, variables, sampling methods, and data collection method [1COMP-1, 1COMP-2, 1COMP-4, 1COMP-6, 1NUR-1]	10%	
Describe biostatistics and all sciences in which the researcher could apply them. [1COMP-1, 1COMP-2, 1COMP-5, 1COMP-6, 1NUR-1]	5%	
Compute different statistical analyses including central tendency and dispersion tests, Z and T tests, estimation, hypothesis testing, biomedical and epidemiological indicators. [1COMP-1, 1COMP-3, 1COMP-6, 1NUR- 5, 1NUR-1]	40%	
Evaluate the outcomes of statistical analyses and form statistical decisions about these outcomes. [1COMP-1, 1COMP-2, 1COMP-4, 1COMP-5, 1NUR- 5]	15%	

Discuss the standardized normal distributions (Z and T test distributions) and their applications. [1COMP-1, 1COMP-2, 1COMP-3, 1COMP-4, 1COMP-5, 1COMP-6, 1NUR-5, 1NUR-1]	20%	
Outline different types of data using histogram, polygon, and bar graph. [1COMP-2, 1COMP-3, 1COMP-5, 1COMP-6, 1NUR-1]	10%	

Relationship to Program Student Outcomes (Out of 100%)											
NUR-1	NUR-2	NUR-3	NUR-4	NUR-5	NUR-6	COMP-1	COMP-2	COMP-3	COMP-4	COMP-5	COMP-6
15.50				13.50		16.50	10.50	12.50	7.50	8.50	15.50

Evaluation	
Assessment Tool	Weight
First Exam	30%
Second Exam	30%
Final Exam	40%

Policy	
Academic Progress	Students are responsible for contacting faculty members for consultation regarding problem with, or questions about the course. Any student who earns a grade of 50% or less on any test or assignment is advised to contact the course instructor to discuss their academic progress
Attendance	The faculty of nursing adheres to the following attendance policy: Attendance in class is mandatory. The faculty understands however, that at times students become ill or have personal or family emergencies that preclude them from attending class. If student misses more than 20%, he will fail the course and receive a course grade of 35%. Students will be asked to sign an attendance sheet daily to document their presence in class. It is the student's responsibility to make sure they sign this attendance record. If a student is absent with acceptable excuse, he/she is responsible for obtaining information\ notes\ handouts from another student. If a student is absent o a test day, this counts as 1 absence.
Testing Policy and Procedure	<p>a. Testing Policy:</p> <ul style="list-style-type: none"> - Students will be expected to place all books and papers away (outside the test-room) while they are taking the test. - Students should place their student's ID on the computer table during the exam. - Any question regarding students' sharing of the test information, talking during the test or any other indication of academic dishonesty will not be tolerated. (Refer to Collage\Student Handbook). - Exam format for the Adult Health Nursing course will be computer- based exam. - Printing or copying of any exam or parts of an exam is considered academic dishonesty. Instances of academic dishonesty will be treated according to the collage policy. <p>b. Student Missing an Exam :</p> <p>If a student is unable to take a test due to acceptable excuse, that student must inform the course instructor. You must negotiate with instructor to make up the test within one week. Student that misses a scheduled test may be asked to take an alternate test.</p>

Assignments\ Quizzes	Various assignments may be given to enhance student learning and interaction with the content. Points will be deducted for late assignments. Graded assignments turned in after the due time noted will be lowered 10%. An additional 10% grade level will be lost for each successive day late. Random, unannounced quizzes may be given during the semester. Unannounced quizzes missed due to absence cannot be made up.
Announcements	You are responsible for any announcements posted by the faculty of nursing or by any member of the faculty. Additional notices and messages are posted on appropriate bulletin boards in the collage of nursing hallways. Students are responsible for messages announced in class and the bulletin boards. Please check these bulletin boards on a regular basis.
Academic Honesty	when we use the information and language of others to enrich our reflection and research papers we must: ? Tell the reader when we are quoting and indicate the source (person, book, article, etc) of the quotation ? Tell the reader when we are paraphrasing and indicate the source (person, book, article, etc) of that information. Quoting or paraphrasing the information and \or language of a source without naming the source is plagiarism. Plagiarism is unacceptable in an academic institution and is subject to penalty. Please consult your faculty member for additional information and policies regarding academic honesty.
Visitors	The Faculty of Nursing adheres to the following policy regarding visitors in class: Students are not permitted to bring children, family members, or other guests to class. This poses a liability to the Collage as well as a distraction to other students and the course faculty.
Disability	If you have specific physical, psychosocial or learning disabilities and require accommodations, please let us know early in the semester so that your learning needs may be appropriately met.
Diversity	The Faculty of Nursing adheres to the following policy regarding diversity: Students are to show respect for the interest, preferences, and opinions of others (clients, students, faculty, staff, etc). There will be zero tolerance for displays of prejudice, discrimination, or hostility based on differences such as gender, nationality, religion, disability. Age or health status. Any student violates this policy will be referred to the Dean.
Equipment\ Materials	Any equipment or materials loaned to students becomes their responsibility and must be returned in proper condition at the designated date, time, and place. Students will not receive a course grade until equipment and materials are returned.

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