

### Course Specification

<b>Programme (s) on which the course is given:</b> B.Sc. nursing	<b>Major / minor:</b>
<b>Department offering the programme:</b> Faculty of nursing	<b>Department offering the course:</b> community Health Medicine, Faculty of Medicine
<b>Academic Year/Level:</b> 4 <sup>th</sup> year/1 <sup>st</sup> semester	<b>Date of Specification approval</b> / / 2022

#### **A- Basic Information**

<b>Title: _:</b> Biostatistics	<b>Code:</b> Sup 405
<b>Credit Hours:</b>	<b>Lecture: _</b> (2h/week)
<b>Tutorial:</b>	

#### **B- Professional Information**

##### **1- Course Objective:**

**At the end of the course the student must be able to**

provide nurses with a foundation of advanced statistics and to become a critical and knowledgeable consumer of nursing research

##### **2- Intended Learning outcomes of course (ILOs)**

###### **a- Knowledge and understanding:**

- a1- Recognize the differences between the nominal, ordinal, interval and ratio scales of measurements
- a2- List the difference between descriptive and inferential statistics
- a3- Specify the variable of a research study
- a4- Define the term frequency distribution
- a5- Identify symmetric and distribution of data
- a6- Define and compute measures of central tendency ( mean, median and mode)
- a7- Define and compute measures of variability (range, variance & standard deviation)
- a8- Summarize data by means of percent's, percentiles, rates and ratio.
- a9- Define population and sample and state the relationship between them.
- a10- Describe the relationship between parameters and statistics.
- a11- List the properties of the normal distribution.
- a12- Describe in words the meaning of sampling error.
- a13- Compute and interpret confidence intervals on the true population proportion.
- a14- List the elements of a statistical test.

a15- State the assumptions and nature of the data necessary for the use a simple t- test.

a16- Discuss the interpretation of correlation.

a17- Determine the correlation between two variables using correlation coefficient.

a18-Describe what probability and non- probability sampling.

**b- Intellectual skills:**

b1- Differentiate the analysis of quantities and qualitative data

**c- Professional and Practical skills:**

c1- Perform simple manipulation using notation.

c2-Construct an absolute frequency table and a relative frequency table.

c3-Present a frequency table graphically by means of a histogram.

c4-Present data by means of bar chart, circle graphs and frequency polygons. c, and paired t- test.

C6-Carry out a test of hypothesis using a pooled t-test of hypothesis using a pooled t-test and a paired t-test, Calculate the X2 test of hypothe1q

**d- General and Transferable skills:**

d1- Use computer and internet skills

**3-Course Content:**

Topic	No. of Hours	Lecture	Tutorial
Introduction to the course of statistics	2	2	-----
Descriptive statistics	2	2	-----
Population, samples and the normal distribution	2	2	-----
Estimating population parameters	2	2	-----
Appropriate statistical test	2	2	-----
Making inferences about means mode media	2	2	-----
Making inferences about means mode media	2	2	-----
Making inferences about means mode media	2	----	2
The chi-squared tests	2	2	-----
Non parametric methods	2	2	-----
Methods of sample selection	1	1	-----

#### 4-Teaching and Learning methods

4.1- Lecture notes

4.2-Demonstration

#### 5- Student assessment methods

5.1-Final term examination to assess student knowledge about the course.

5.2- Oral Examination to assess student knowledge about the course

5.3- Semester Work to assess student abilities in practical field.

#### Assessment schedule

1- Final-term Examination at the end of course.

2- Oral Examination at the end of course.

3- Semester Work during course teaching

#### Weighting of assessments 100 marks

Mid-term examination	---- %
Final – term examination	60 %
Oral examination	20 %
Semester work	20 %
Other Types of assessment	----%
Total	100%

#### 6- List of references

6.1- Course notes

Complied course notes prepared by teaching staff.

6.2- Essential books (text books)

Course notes prepared by teaching staff.

6.3- Recommended books

- Rebecca G. Knapp (2015): Basic statistics for nurses. 2<sup>nd</sup> ed ,A willy Medical publication, John Wiley & sons, New York, Chchester, Brisbane, Toronto, Singapore.
- Aviva petrie (2012): Lecture Notes on Medical Statistics. Block well scientific publications, Oxford London, Edinburgh, Boston, Paloalto mebcurne

6.4- Periodicals, Web sites . etc.

Course Coordinator:

Head of Department:

٢٠٢٣ / خالد السقري مصنف

Date: / /



**University:** Sohag University

**Faculty:** Faculty of nursing

**Department of:** community Health Medicine, Faculty of Medicine

<b>Course name</b>	Biostatistics
<b>Course code</b>	Sup 405

**Intended Learning outcomes of course**

Topic	Number of weeks	Knowledge and understanding	Intellectual skills	Professional skills	General skills
Introduction to the course of statistics	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Descriptive statistics	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Population, samples and the normal distribution	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Estimating population parameters	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Appropriate statistical test	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Making inferences about means mode media	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Making inferences about means mode media	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Making inferences about means mode media	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
The chi-squared tests	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Non parametric methods	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2
Methods of sample selection	One week	a1, a2, a3, a4, a5.	b1 & b2	C1, C2, C3 & C4	d1 & d2

**Course Coordinator:**

٢٠٢ / خالد النوف مصنف

**Head of Department:**

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**Date:**

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التاريخ : 2022/7/19

إصدار / تعديل (0/1) -

نموذج رقم SP00QF110001