Courses specification 1st year-1st semester

Course Specification

I. Course Identification and General Information:						
1	**Course Title:**	**SPSS Statistics**				
2	**Course Code &Number:**	**MNSG01**				
3	**Credit hours: 3**	C.H				TOTAL
		Th.	Seminar	Pr	Tr.	
		2	-	1	-	**3**
4	**Study level/ semester at which this course is offered:**	First year/First semester				
5	**Pre –requisite:**	-				
6	**Co –requisite :**	-				
7	**Program (s) in which the course is offered:**	Critical care nursing				
8	**Language of teaching the course:**	English				
9	**Location of teaching the course:**	Faculty of Nursing				
10	**Prepared By:**	Professor. Nabil Al-Rabeei				
11	**Date of Approval**	2022				

II. Course Description:

This course logically guides students through the fundamentals of using SPSS and is structured so as to provide effective training in the 4 stages of a typical data analysis process-data definition and input, data modification, data analysis and data presentation. To learn how to import data into SPSS and set it up ready for further analysis.

III. Intended learning outcomes of the course (ILCOs) and their alignment to Program Intended learning outcomes (PILOs)	
ILCOs	**PILOs**
1. Identify concepts and principles of data entry, analysis, presentation and interpretation. 2. Summarize data through the appropriate use of tables, graphs, and descriptive statistics. 3. Select appropriate statistical methods for testing research hypotheses and answering research questions. 4. Apply appropriate measurements and data analysis techniques by SPSS program.	A1 D4 B1 C2

(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
a1. Identify concepts and principles of data entry, analysis, presentation and interpretation.	Lecture Discussion Demonstration	Short answers Objective type

(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1. Select appropriate statistical methods for testing research hypotheses and answering research questions.	Lecture Discussion Demonstration	Short answers Objective type

C. Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
c1. Apply appropriate measurements and data analysis techniques by SPSS program.	Lecture Student assignment Practice Session	Short answer questions Objective type Practical Exam

(D) Alignment Course Intended Learning Outcomes of General and Transferable Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1. Summarize data through the appropriate use of tables, graphs, and descriptive statistics.	Lecture Student assignment Practice Session	Short answer questions Objective type Practical Exam

III. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Sub Topics List	No. of Weeks	Contact hours	Learning Outcome
1	Feature of the SPSS Program	• Introduction to SPSS • Preliminaries: o Running SPSS o Entering SPSS • Three Primary SPSS Windows o The Data Editor o The Output Viewer o The Syntax Editor. • Switching Between Windows • Common Window Features: o Title Bar o Menu Bar o Toolbar o Status Bar o • Unique Window Features: • Data Editor o Data View o Variable View • Output Viewer • Syntax Editor	1	2	a1
2	The Menus – Overview	• Common Menus • Unique Menus • The Menus – Up Close o File Menu o Edit Menu o View Menu o Data Menu o Transform Menu	1	2	a1,b1

		○ Analyze, Window, and Add-Ons Menus ○ Graphs Menu ○ Utilities Menu ○ Help Menu ○ Insert Menu ○ Format Menu ○ Run Menu			
3	Data File Preparation	• Data Entry • Defining Variables • Practice Data Entry	1	2	a1,d1
4	Steps of testing statistical hypothesis	• State statistical hypothesis • Chose the appropriate statistical test • Specify the level of significance • Conduct the statistical tests • Decide to reject or accept hypothesis	1	2	a1,d1
5	Descriptive Statistics	• Descriptive • Frequency • Crosstabs	1	2	a1,d1
6	Parametric test	• Independent Samples T-Test ○ Overview ○ Assumptions ○ Running Procedure ○ Reading Output ○ Interpretation	1	2	a1,b1,d1
7	Midterm exam		1	2	a1,b1,d1
8	Nonparametric Tests	• Mann-Whitney test o Overview o Assumptions o Running Procedure o Reading Output ○ Interpretation	1	2	a1,b1,d1

9	Parametric test	• Paired Samples T-Test o Overview o Assumptions o Running Procedure o Reading Output • Interpretation	1	2	a1,b1,d1
10	Nonparametric Tests	• Wilcoxon signed rank test o Overview o Assumptions o Running Procedure o Reading Output • o Interpretation	1	2	a1,b1,d1
11	Parametric test	• One-Way ANOVA o Overview o Assumptions o Running Procedure o Reading Output o Interpretation	1	2	a1,b1,d1
12	Nonparametric Tests	• Kruskal-Wallis test o Overview o Assumptions o Running Procedure o Reading Output • o Interpretation	1	2	a1,b1,d1
13	Parametric test	• One-Way Repeated measure ANOVA o Overview o Assumptions o Running Procedure o Reading Output o Interpretation	1	2	a1,b1,d1
14	Nonparametric Tests	• Friedman test o Overview o Assumptions o Running Procedure o Reading Output	1	2	a1,b1,d1

		• o Interpretation			
15	Nonparametric Tests: relationship	• Chi-Squared for independent o Overview o Assumptions o Running Procedure o Reading Output o Interpretation	1	2	a1,b1,d1
16	Final exam		1	2	a1,b1,d1
Number of Weeks /and Units Per Semester			**16**	**32**	

B – Practical Aspect:

Order	Tasks/ Experiments	Number of Weeks	Contact hours	Learning Outcomes
1	• Feature of the SPSS Program o Running SPSS o Entering SPSS o Three Primary SPSS Windows o Switching Between Windows	1	1	d1
2	• Working with data o Opening SPSS Files o Saving SPSS Files o Exporting and Importing Data o Merging Two Data Files o Printing	1	1	c1,d1
3	• Data File Preparation	2	2	c1,d1
4	• Steps of testing statistical hypothesis o Normality distribution	1	1	c1,d1
5	• Descriptive Statistics o Descriptive o Frequency o Crosstabs	1	1	c1,d1
6	• Independent Samples T-Test o Running Procedure o Reading Output o Interpretation	1	1	c1,d1
7	Midterm exam	1	1	c1,d1

8	• Mann-Whitney test o Running Procedure o Reading Output o Interpretation	1	1	c1,d1
9	• Paired Samples T-Test o Running Procedure o Reading Output o Interpretation	1	1	c1,d1
10	• Wilcoxon signed rank test o Running Procedure o Reading Output o Interpretation	1	1	c1,d1
11	▪ One-Way ANOVA o Running Procedure o Reading Output o Interpretation	1	1	c1,d1
12	• Kruskal-Wallis test. o Running Procedure o Reading Output o Interpretation	1	1	c1,d1
13	• One-Way Repeated measure ANOVA o Running Procedure o Reading Output o Interpretation	1	1	c1,d1
14	• Chi-Squared of Independence o Running Procedure o Reading Output o Interpretation	1	1	c1,d1
15	Final exam	1	1	c1,d1
Number of Weeks /and Units Per Semester		16	32	

IV. Teaching strategies of the course:

1. Lecture - Discussion
2. Demonstration
3. Student assignment
4. Practical session
5. Presentation:
   - McNemar test
   - Cochran Q test
   - One sample t-test
   - One sample chi-square test

V. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	One assignment for each statistical test	a1, b1, d1	2-14	20

VI. Schedule of Assessment Tasks for Students during the Semester: Theoretical part and Practical part

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Presentation	4th and 12th week	10	10%	a1 , b1, d1
2	Assignments	5th and 12th week	20	20%	a1 , b1, d1
3	Mid-term exam	7th or 8th week	20	20%	a1 , b1, d1
4	Final exam	16th-17th week	50	50 %	a1 , b1, d1
	Total Theory Weight		**100**	**100%**	

VIII. Learning Resources:

1- Required Textbook(s) (maximum two).

1. SPSS Programming and Data Management. A Guide for SPSS and SAS® Users, 3rd ed. Raynald Levesque and SPSS Inc, 2001.

2- Essential References.

1. An Introduction to Biostatistics: A manual for students in Health Sciences: P.S.S. Sundar Rao, J. Richard Prentice Hall , New Delhi, 2005.
2. Bio-Statistics: A foundation for Analysis in the Health Sciences: Daniel, W.W., John Wiley and Pub., Canada, 2006.

	3. Handbook of Statistics: Krishnaiah, P.K. Rao, C.R. (ed), Elsevier Science Pub. Netherlands, 2011.
3- Electronic Materials and Web Sites *etc*.	
	www.google.com

IX. Course Policies:	
1.	**Class Attendance:** At least 75 % of the course hours should be attended by the student. Otherwise, he/she will not be allowed to attend the final exam
2.	**Tardy:** any student who is late for more than 15 minutes from starting the lecture will not be allowed to attend the lecture and will be considered absent.
3.	**Exam Attendance/Punctuality:** Any student who is late for more than 30 minutes from starting the exam will not be allowed to attend the exam and will be considered absent.
4.	**Assignments & Projects:** Assignments and projects will be assessed individually unless the teacher request for group work
5.	**Cheating**: Cheating by any means will cause the student failure and he/she must re-study the course
6.	**Plagiarism**: Plagiarism by any means will cause the student failure in the course. Other disciplinary procedures will be according to the college rules.

Course Plan (Syllabus)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member	Prof. Nabil Ahmed Al-Rabeei	**Office Hours**					
Location&Telephone No.	734699333	**SAT**	**SUN**	**MON**	**TUE**	**WED**	**THU**
E-mail	nabilalrabeei@hotmail.com		x				

II. Course Identification and General Information:						
1.	**Course Title:**	**SPSS Statistics**				
2.	**Course Number & Code:**	**MNSG01**				
3.	Credit hours: 3	**C.H**			**Total**	
		Th.	**Seminar**	**Pr.**	**F. Tr.**	
		2	-	1		**3**
4.	Study level/year at which this course is offered:	First year/First semester				
5.	Pre –requisite:	--				
6.	Co –requisite :	--				
7.	Program (s) in which the course is offered	Critical care nursing				
8.	Language of teaching the course:	English				
9.	System of Study:	Semester system				
10.	Mode of delivery:	Full time				
11.	Location of teaching the course:	Faculty of Nursing				

III. Course Description:

This course logically guides students through the fundamentals of using SPSS and is structured so as to provide effective training in the 4 stages of a typical data analysis process-data definition and input, data modification, data analysis and data presentation. To learn how to import data into SPSS and set it up ready for further analysis.

IV. Intended learning outcomes (ILOs) of the course:

1. Identify concepts and principles of data entry, analysis, presentation and interpretation.
2. Summarize data through the appropriate use of tables, graphs, and descriptive statistics.
3. Select and apply appropriate statistical methods for testing research hypotheses and answering research questions.

V. Course Content:

Distribution of Semester Weekly Plan of Course Topics/Items and Activities.

A – Theoretical Aspect:

Order	Topics List	Week Due	Contact Hours
1	Feature of the SPSS Program	1	2
2	Common Window Features	2	2
3	The Menus – Overview	3	2
4	Data File Preparation	4	2
5	Steps of testing statistical hypothesis	5	2
6	Descriptive Statistics	6	2
7	Midterm exam	7	2
8	Parametric test: Independent t-test	8	2
9	Non-Parametric test: Mann-Whitney U test	9	2
10	Parametric test: Paired t-test	10	2
11	Non-Parametric test: Wilcoxon signed rank test	11	2
12	Parametric Tests: One-way-ANOVA	12	2
13	Nonparametric Test: Kruskal-Wallis test	13	2
14	Non-Parametric test: Friedman test	14	2
15	Relationship: Chi-esquire test	15	2
16	Final exam	16	2
Number of Weeks /and Units Per Semester		**16**	**32**

B– Practical Aspect:			
Order	**Topics List**	**Week Due**	**Contact Hours**
1	Feature of the SPSS Program	1	1
2	Working with data	2	1
3	Data File Preparation	3-4	2
4	Testing Normality	5	1
5	Descriptive Statistics	6	1
6	Independent Samples T-Test	7	1
7	Midterm Exam	8	1
8	Mann-Whitney U test	9	1
9	Paired t-test	10	1
10	Wilcoxon signed rank test	11	1
11	One-way-ANOVA	12	1
12	Kruskal-Wallis test	13	1
13	Friedman test	14	1
14	Chi-esquire test	15	1
15	Final exam	16	1
Number of Weeks /and Units Per Semester		16	32

VI. Teaching strategies of the course:
1. Demonstration
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4. Presentation: • McNemar test • Cochran Q test • One sample t-test • One sample chi-square test

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