

نموذج رقم ( 12 )

جامعة: Mansoura

كلية: Nursing

قسم: Community Health Nursing

توصيف مقرر دراسي

1- بيانات المقرر		
4th level / 7 <sup>th</sup> semester of BSc.N Program	الفرقة/المستوى	اسم المقرر Biostatistics
1 credit hour	نظري	الرمز الكودى CS c 706
1 credit hour	عملي	التخصص B.Sc. in Nursing credit hour system
	عدد الساعات الدراسية	

This course aims to equip nursing student with basic knowledge and skills required to apply statistics to health services and studies	2-هدف المقرر
<b>By the end of the course the candidate will be able to</b>	3-المستهدف من تدريس المقرر
A.1-Describe the basic concepts of biostatistics and data analysis. A.2-Identify different methods of data collection A.3- Identify types of variables and coding techniques A.4- Identify SPSS program A.5- Describe the application of various descriptive statistical analyses. A.6-Mention the different methods of data presentation A.7-Identify uses and application of various inferential statistical analyses.	أ-المعلومات والمفاهيم

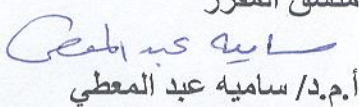
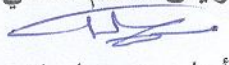
<p>A.8-Describe the concept of “Hypothesis Testing”</p> <p>A.9- Mention the importance and types of different biostatistics rates.</p> <p>A.10- Identify the sampling types and sampling techniques</p> <p>A.11-Mention the different methods of data documentation</p>	
<p>B.1- Choose appropriate technique for data collection.</p> <p>B.2-Determine possible modes of administration for the questionnaire.</p> <p>B.3-Differentiate between the different types of variables, questions and level of measurements.</p> <p>B.4-Check the error or missing in the data file.</p> <p>B.5- Select the appropriate methods of data presentation according to type of variable.</p> <p>B.6- Calculate measures of central tendency and measures of dispersion.</p> <p>B.7-Differentiate between alternative and null hypotheses</p> <p>B.8- Compare between chi-square test (<math>\chi^2</math>), T-tests and One way ANOVA uses and assumptions.</p> <p>B.9- Select appropriate statistical test to test hypothesis according to the type of variable..</p> <p>B.10- Interpret dispersion of data and normal distribution curve.</p> <p>B.11- Interpret the significance of chi-square test <math>\chi^2</math> test, T-tests, and One way ANOVA test.</p> <p>B.12- Calculate the different bio-statistical rates</p> <p>B.13- Calculate the sample size according to the available data and study design</p>	<p>ب-المهارات الذهنية الخاصة بالمقرر</p>
<p>C.1- Develop the format and layout of a questionnaire with correct list of questions and units of measurement.</p> <p>C.2- Collect data from participant or respondent.</p>	<p>ج-المهارات المهنية الخاصة</p>

<p>C.3- Code the different types of variables.</p> <p>C.4- Construct data file by ‘defining’ the variables using SPSS Program.</p> <p>C.5- Enter the data—that is, the values obtained from each participant or respondent for each variable.</p> <p>C.6- Correct the error or missing in the data file.</p> <p>C.7- Use SPSS Program for descriptive analysis of data.</p> <p>C.8- Obtain descriptive statistics for categorical variables using frequencies.</p> <p>C.9- Obtain descriptive statistics for continuous variables using descriptive.</p> <p>C.10- Use graphs and tables to describe and explore the data</p> <p>C.11- Edit a graph or chart to better suit needs.</p> <p>C.12- Import charts/graphs into Word documents</p> <p>C.13- Set up tabulations effectively into Word documents.</p> <p>C.14- Draw graphs/tables manually according to type of variable.</p> <p>C.15- Apply test of normality.</p> <p>C.16- Test hypothesis using chi-square test (<math>\chi^2</math>) test, T-tests, and One way ANOVA test on SPSS Program.</p> <p>C.17-Document data scientifically</p>	<p>بالمقرر</p>
<p>D.1- Use information technology</p> <p>D.2- Utilize the principles of problem solving in application of statistical analysis</p>	<p>د-المهارات العامة</p>
<p>E.1- Apply the principles of privacy and information confidentiality of collected research data</p>	
<p><b>Unit I: Introduction to Biostatistics</b></p> <ul style="list-style-type: none"> <li>• Definition and purposes of biostatistics</li> </ul>	<p>4-محتوى المقرر</p>

<ul style="list-style-type: none"> <li>• Overview of bio- statistical design of health studies</li> </ul> <p><b>Unit II: Collecting and handling of bio-statistical data</b></p> <ul style="list-style-type: none"> <li>•Data collection and forms' design</li> <li>•Coding of data</li> <li>•Data entry by using statistical software (SPSS)</li> </ul> <p><b>Unit III: Presentation of statistical data</b></p> <p><i>Descriptive biostatistics</i></p> <ul style="list-style-type: none"> <li>• Tabulation</li> <li>• Graphs and charts</li> <li>• Mathematical presentation (Measures of central tendency and Measures of dispersion)</li> </ul> <p><b>Unit IV: Inferential statistics</b></p> <ul style="list-style-type: none"> <li>• T- tests</li> <li>• One way ANOVA</li> <li>• X<sup>2</sup> square</li> <li>• Correlation coefficient</li> </ul> <p>Unit V: Biostatistics rates</p> <p>Unit VI: Sampling size</p> <p>Unit VII: Method of recording and reporting and documentation techniques</p>	
<p><b>1- Interactive Lectures</b></p> <p><b>2- Small group work</b></p> <p><b>3- Computer lab training</b></p> <p><b>3- Project- Based Learning (PBL)</b></p>	<p>5-أساليب التعليم والتعلم</p>
<p>Not applicable</p>	<p>6-أساليب التعليم والتعلم للطلاب</p>

		ذوى القدرات المحدودة
<b>7- تقويم الطلاب</b>		
<b>1- Semester summative evaluation:</b> a- Project report b- Semester written examination <b>2- Summative final evaluation that include:</b> a- Multi-stations practical examination b- Final written examination		أ- الأساليب المستخدمة
<b>1- Semester summative assessment</b>		ب- التوقيت
a- Semester written examination	7 <sup>th</sup> week	
b- Semester activities	14 <sup>th</sup> week	
- Project report		
<b>2- Final summative assessment</b>		
a- Multi-stations practical examination	15 <sup>th</sup> week	
b- Final written examination	16 <sup>th</sup> week	
<b>1- Semester summative evaluation:</b> a- Semester written examination 40 marks (20%) b- Semester activities evaluation (Project report) 60 marks (30%) <b>2- Final summative evaluation:</b> a- Multi-stations practical examination 20 marks (10%) b- Final written examination 80 marks (40%)		ج- توزيع الدرجات
<b>8- قائمة الكتب الدراسية والمراجع</b>		
• Not applicable		أ- مذكرات

8- قائمة الكتب الدراسية والمراجع	
• Not applicable	أ- مذكرات
• Not applicable	ب- كتب ملزمة
<ul style="list-style-type: none"> <li>• <b>Rosner, B. (2017).</b> Fundamentals of biostatistics. (8<sup>th</sup> ed). USA, Boston: Cengage Learning. ISBN: 978-1-305-26892-0</li> <li>• <b>Marshall, E., &amp; Boggis, E. (2016).</b> The statistics tutor's quick guide to commonly used statistical tests. University of Sheffield. Available online: <a href="http://www.statstutor.ac.uk/resources/uploaded/tutorsquickguidetostatistics.pdf">http://www.statstutor.ac.uk/resources/uploaded/tutorsquickguidetostatistics.pdf</a></li> </ul>	ج- كتب مقترحة
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مجلس رقم (134) بتاريخ 2014/6/18	معتمد بموافقته مجلس الكلية
مجلس القسم بتاريخ 2018/11/5	تم مراجعته وتحديثه طبقاً للمعايير الأكاديمية القومية المرجعية بتاريخ
منسق المقرر  أ.م.د/ ساميه عيد المعطي	رئيس القسم العلمي  أ.د/ سحر سليمان