

Course Syllabus

1	Course title	Scientific Research and Statistical Methods
2	Course number	0703307
3	Credit hours	3 credit hours (Theory)
	Contact hours (theory, practical)	3 credit hours (Theory)
4	Prerequisites/co-requisites	None
5	Program title	B.Sc. in Nursing
6	Program code	-----
7	Awarding institution	The University of Jordan
8	School	School of Nursing
9	Department	Maternal and Child Health Nursing
10	Course level	Fourth Year Course Level
11	Year of study and semester (s)	Spring 2022-2023
12	Other department (s) involved in teaching the course	B.Sc. in Nursing
13	Main teaching language	-----
14	Delivery method	<input type="checkbox"/> Face to face learning x <input type="checkbox"/> Blended <input type="checkbox"/> Fully online
15	Online platforms(s)	<input type="checkbox"/> x Moodle <input type="checkbox"/> x Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....
16	Issuing/Revision Date	28.02.2023

17 Course Coordinator:

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18 Other instructors:

Name:
 Office number:
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19 Course Description:

As stated in the approved study plan.

This course is designed to introduce students to the basic concepts of research, its nature, purposes, methods, literature review, data collection, analysis & utilization. It focuses on the application of the scientific method in dealing with health problems, and allows the student the opportunity to prepare research projects.

20 Course aims and outcomes:

A- Aim:

The goal of this course is to introduce the undergraduate nursing student to the research process as presented in professional nursing literature. It aims at introducing the basic concepts of research, its nature, purposes, methods, literature review, data collection, analysis & utilization. Emphasis will be on the applicability and implementation of the research process to nursing and health-related problems. The course provides nursing students with the opportunity to prepare for research projects.

B- Students Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

PILO #1: Demonstrate competency in performing and providing the role of a professional nurse in quality care provision for individuals, families, and groups.

SLO

- 1.1 Identify the major steps of the scientific research process to participate in conducting research.
- 1.2 Judge unethical practices while participating and/or-conducting nursing as well as while encountering health research situation.

PILO #2: Apply principles of effective communication with peers, individuals, families, groups, and health care team.



SLO

- 2.1 Identify varied venues for communicating findings of nursing research.

PILO 3: Utilize critical thinking and problem solving in planning and implementing nursing care for individuals, families, and groups.

- 3.1 Demonstrate knowledge of the historical evolution of and future direction for nursing research at a national and international level.
- 3.2 Explain the role of research in the development of nursing knowledge.
- 3.3 Recognize current research priorities in nursing at the national and international levels.
- 3.4 Explain briefly the relationships among nursing theory, nursing research, and nursing practice.
- 3.5 Explain components to research process: problem statement, hypothesis, and review of literature, methods and designs, measurement, analysis of data, and utilization and presentation of research findings.
- 3.6 Analyze ethical issues involved in nursing research.
- 3.7 Distinguish the qualitative and quantitative approaches of scientific research.
- 3.8 Compare the need for using populations and samples in conducting research studies.
- 3.9 Demonstrate an understanding of the concept of measurement in conducting research.
- 3.10 Compare and contrast the various types of data-collection methods
- 3.11 Demonstrate an understanding of descriptive and inferential statistics

PILO # 4: Apply professional standards, values, and behaviors in providing nursing care for individuals, families, and groups.

SLO

- 4.1 Interpret importance of accountability for the utilization of nursing research in clinical practice to promote, maintain, restore, and reorganize health, or to support death with dignity.

PILO # 5: Demonstrate safety measures to protect self, individuals, families, and groups.

SLO:

- 5.1 Apply the principles of conducting scientific research study in order to analyze and evaluate published nursing research studies.
- 5.2 Judge unethical practices while participating and/or-conducting nursing as well as while encountering health research situation.



PILO # 6: Translate organizational, leadership, inter professional collaboration, and management concepts into nursing care for individuals, families, and groups.

SLO:

- 6.1 Demonstrate understanding of methods of disseminating research evidence
- 6.2 Identify sources of best evidence for improvement of nursing practice

PILO #7: Utilize evidence-based practice in providing care for individuals, families, and groups.

SLO:

- 7.1 Identify varied sources for evidence relevant to nursing discipline.
- 7.2 Recognize hierarchy of evidence base research
- 7.3 Apply critical thinking skills in the evaluation of published nursing research for applicability of findings to nursing practice (clinical, education and administration).

21. Topics Outlines and Schedule:

Topic	Week	Instructors	Achieved ILOs	Evaluation Methods for ILOs	Reference Readings and Activities
Unit1: Introduction & Development of Nursing Research	1	Dr. Zyad Saleh	3.1-3.4	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch2
Unit 2: Identifying Nursing Research Problems	2	Dr. Zyad Saleh	3.5	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 6
Unit 4: Review of the Literature	3	Dr. Zyad Saleh	3.5	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 7
Unit 6: Hypotheses	4	Dr. Zyad Saleh	3.5	Midterm exam and Written	Nieswiadomy & Bailey (2017). Ch 9

				Assignment	
Unit 3: Ethical Issues in Nursing Research	5	Dr. Zyad Saleh	1.2, 3.6, 5.2	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 3
Unit 7: Quantitative Research Designs	6	Dr. Zyad Saleh	3.7	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 10 + McGrath & Brandon (2018).
Unit 8: Qualitative Research Designs	7	Dr. Zyad Saleh	3.7	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 11
Midterm exam TBD					
Unit 9: Populations and Samples	8	Dr. Zyad Saleh	3.8	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch12
Unit 10+11: Measurement & Data-Collection	9	Dr. Zyad Saleh	3.9, 3.10	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 13+14

Methods					
Unit 12: Descriptive Statistics	10	Dr. Zyad Saleh	3.11	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 15
Unit 13: Inferential Statistics	11	Dr. Zyad Saleh	3.11	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 16
Unit 14: Presentation and Discussion of Study Findings	12	Dr. Zyad Saleh	2.1, 5.1	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 17
Communicating nursing research Evidence based nursing practice	13	Dr. Zyad Saleh	4.1, 7.1,7.2, 7.3	Midterm exam and course project	Nieswiadomy & Bailey (2017). Ch 18,19
Assignment discussion	14 & 15	Written Assignment (Due Date: TBD)			

Final Exam		(TBD according to the University schedule & regulations)	
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22 Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:	
Evaluation Methods	
Exams	Assigned Points
Midterm Exam: (Semester week according to the university regulations)	30%
Assignments	
<ul style="list-style-type: none"> • Assignment: (Date: as noted in the course outlines) • Instructions and Grading: (refer to appendix #1) • Objective: <ol style="list-style-type: none"> 1. At the end of the final course project, the students are expected to develop the ability to prepare a proposal outlining the research plan based on guidelines provided in the course textbook 	20%
<ul style="list-style-type: none"> • Project presentation and discussion 	10%
Final Exam: (Semester week according to the university regulations)	40%
Total	100%

23 Course Requirements

students should have a computer, speakers internet connection, webcam, account on a Moodle and M. Teams platforms, official JU email

24 Course Policies:

Please refer to the **university policies** as published up-to-date in the link below:
<http://units.ju.edu.jo/ar/LegalAffairs/Lists/Regulations/DispForm.aspx?ID=246&ContentTypeId=0x0100C7850F392E786A439F935E088708707E>

25 References:



A- Required book (s), assigned reading and audio-visuals:

1. Nieswiadomy, R. M., & Bailey, C. (2018). *Foundations of Nursing Research- e-Book*. (7th ed.) Pearson.
2. Polit, D. F., & Beck, C. T. (2020). *Essentials of nursing research: Appraising evidence for nursing practice*. Lippincott Williams & Wilkins

For good research articles, please refer to the following journals: This list is non-conclusive.

1. Nursing Research
2. Applied Nursing Research
3. Clinical Nursing Research
4. Western Journal of Nursing Research
5. Educational Review- Researching Health Issues in Education
6. Advances in Nursing Science
7. Image: The Journal of Nursing Scholarship
8. International Journal of Nursing Studies
9. International Nursing Review
10. Scandinavian Journal of Caring sciences.

A- Electronic resources

E-Library

E-learning (Moodle)

Relevant Website and Journals

- **Database**
<http://jdnr.ju.edu.jo>

26 Additional information:

1. *It is expected that all students will submit all assignments on time. If you need an extension, it must be requested from your instructor before the due date and may or may not be approved at the discretion of the course coordinator/instructor. Unexcused late assignments will be penalized 10% per day for each of the first two days overdue; on the 3rd day, the grade will be assigned as 0%.*
2. *You are not allowed to audio record any classes without prior permission from the*

instructor, failure to comply with this rule and the communication of such material will subject students to legal investigations.

Appendix 1

<p style="text-align: center;">The University of Jordan School of Nursing Scientific Research and Statistical Methods 0703307 Course Project</p>	
Purpose	At the end of the final course project, the students are expected to develop the ability to prepare a proposal outlining the research plan based on guidelines provided in the course textbook (8-10 pages of text). The students are expected to work within collaborative small groups (3-5 students/group).
Important Instructions	<ol style="list-style-type: none"> 1. Apply professional writing skills in your written assignment. 2. Use font size 12, <i>Times Romans</i> font only and apply paper margins of no less than 2.5 cm on all sides. 3. When you are done with writing your assignment, review your proposal for misspellings, grammar, and editorial issues; grades will be subtracted for such editorial issues. 4. Adhere to the deadline of the submission date; marks will be subtracted for late submissions.

Proposal outlines	Instruction	Grade
Introduction (1.5 marks)	<ul style="list-style-type: none"> • Introduce the research area of interest. 	
Statement of Problem or Question and hypothesis (1.5 marks)	<ul style="list-style-type: none"> • Specify clearly the research problem or purpose of the research. • State measurable correctly written research questions/aims 	
Significance of the Proposed Research (1.5 marks)	<ul style="list-style-type: none"> • Convince the reader of the importance of the proposed study. • Or identify the theoretical and practical significance of the research. 	
Note. All previous sections should be written with no more than 500 words		
Literature Review (5.5 marks)	<ul style="list-style-type: none"> • Summarize concisely 5 research articles. • The literature review should be related to the proposed study aims. • Summarize each article in one paragraph with no more than 300 words each. • Summarization should include: Aim of the study, methods, main results, conclusion, and citation. • Adhere to the APA style guidelines in all citations. 	
Methodology (8 marks)	<ul style="list-style-type: none"> • Justify the methodology in relation to the research topic or problem • Describe the methodological approach or design of the study. • Describe the sample, sampling context, settings, and 	

	<p>timeline.</p> <ul style="list-style-type: none"> • Describe planned analysis. • Justify methodology, data gathering methods and planned analysis. • Describe the research instruments for collecting data with a view to their appropriateness to the research being conducted. • Describe in details how you will conduct the study, protect the rights of participants, and obtain informed consent. 	
References (2 marks)	<ul style="list-style-type: none"> • List references cited in the text in APA format 	
Total		

Research Methodology in Nursing (0703307)

Items Grading Writing a Research Proposal

Unacceptable	0%	Does not meet the criterion, or the intent of the criterion, at all			
Average	25%	Meets minimum of the components of the criterion			
Above average –Good	50%	Meets some components of the criterion			
Very good	75%	Meets most components of the criterion			
Outstanding	100%	Meets all components of the criterion			
Each proposal outline evaluation criteria	Unacceptable 0%	Average 25%	Above average – Good 50%	Very good %75%	Outstandin g 100%
Total out of (20)					



Name of Course Coordinator:-Zyad Saleh, Ph.D., RN-Signature: -- -Date: 28.02.2023	
Head of Curriculum Committee/Department: -----	Signature: -----

Head of Department: ----- <i>diana Arabiat</i> -----	Signature: -- <i>Diana</i> --

Head of Curriculum Committee/Faculty: -----	Signature: -----

Dean: -----	Signature: -----
