Course Description Template

1.Course Name:

Research Methods in Nursing

2.Course Code:

RSM302

3.(Semester-based)

2024 / 2025 (Semester-based)

4.description preparation date:**5/2/2025**

5.Available Attendance Modes: In-person

6.Total Study Hours / Total Credits:

Theoretical: 2 hours/week

Practical: -----

Number of study hours (total)/ 30 theoretical hours

Number of units (total): 2 units

7.Course Coordinator(s) (if more than one, please specify):

Name: Samia Farouk Mahmoud

Email: prof.samia.zag@gmail.com

8-Course Objectives

I. Cognitive Objectives	Learning Objectives
At the end of the course, the students should be able to: 1. Identify the steps of the scientific research process in nursing, from defining the problem to interpreting the results. 2. Define key concepts and variables in research, classify them, and determine their role in the study. 3. Describe the characteristics of scientific research and its alignment with academic standards. 4. Differentiate between various researches methodologies and select the most appropriate one based on the study's nature. 5. Outline the essential steps of the research process, from problem identification to writing the final report. 6. Recognize the key factors to consider when selecting a research topic and their impact on study design. 7. Classify different types of research variables (e.g., independent, dependent) and explain their significance. 8. Define the objectives of scientific research and formulate them clearly. 9. Explain the characteristics of hypotheses and their importance in guiding research.	

10. Differentiate between various research designs, including descriptive and experimental designs, and determine the most suitable approach. 11. Identify different data collection methods (e.g., interviews, observations, questionnaires) and apply them appropriately in research. 12. Identify data collection methods and **apply** them in scientific research (interviews, observations, questionnaires). 13. Understand the sampling process, including types of samples and how to select the appropriate sample. 14. Recognize ethical principles in scientific research and implement them in nursing-related research. 15. Interpret data and apply the results within the context of the research. **II. Skill objectives** 16. Formulate the research question clearly based on the defined problem. 17. Develop scientifically accurate research hypotheses that guide the study. 18. Select the appropriate research design according to the research objectives and the nature of the sample. 19. Apply various data collection methods such as interviews, questionnaires, and observations to gather research information. 20. Conduct research interviews with participants according to scientific standards and document the data. 21. Utilize statistical analysis tools to analyze and interpret the collected data scientifically. 22. Prepare comprehensive research reports that include all research stages from design to final interpretation of results. 23. Select appropriate samples for the research based on sample size and techniques (random, stratified, etc.). 24. Apply ethical principles in data collection, handling participants, and ensuring confidentiality. 25. Write the final research report academically, presenting results and recommendations.	
9.Teaching and Learning Strategies	
Teaching Methods: • **Lectures**: To present basic information and theoretical concepts. • **Group Discussions**: To enhance critical thinking and active participation among students.	Strategy

- **Teamwork**: To develop collaboration skills and the practical application of concepts.
- **Brainstorming**: To generate creative ideas and solutions.
- **Problem-based Learning**: To encourage students to solve real-world problems.

Assessment Methods:

- **Written Tests**: To measure theoretical understanding of concepts and terminology.
- **Practical Assessment (Applied Skills)**: Through case studies or hands-on activities.
- **Participation in Group Discussions**: To assess interaction level and critical understanding.
- **Brainstorming**: To evaluate the creative input and solution-oriented thinking.
- **Reports**: To assess written communication and research capabilities.
- **Extracurricular Activities**: To evaluate engagement and learning outside the classroom.
- **Quizzes**: To measure quick understanding and recall of key concepts.

10. Course Structure
First Semester

Week	Hours	Learning Outcomes	Unit or Topic Name	Learning Method	Assessment Method
1	2	- Identify the steps of scientific research in nursing.	Unit 1: Introduction to Scientific Research in Nursing	Lecture, Group Discussion	• Short Quiz, Discussion
2	2	- Define concepts and variables in the research problem.	Unit 2: Research Concepts and Variables	Lecture, Case Study	Oral Exam, Exercises
3	2	- Describe the characteristics of scientific research.	Scientific Research Characteristics and Objectives	Presentation, Discussion	Case Analysis Report
4	2	- Identify different types of research methodologies.	Unit 3: Types of Research Methodologies in Nursing	Lecture, Group Work	Short Quiz
5	2	- Understand the basic steps of the scientific research process.	Stages of the Scientific Research Process	Lecture, Practical Workshop	Short Quiz, Homework
6	2	- Identify factors to consider when selecting a research topic.	Formulating a Research Topic in Nursing	Lecture, Case Study Discussion	Short Quiz

7	2	- Identify types of variables in research.	Unit 4: Types of Variables in Scientific Research	Lecture, Interactive Exercises	Short Quiz, Exercises
8	2	- Understand the importance of hypotheses in scientific research.	-	Lecture, Group Discussion	Hypothesis Evaluation
9	2	- Understand research methods and their purpose.	Research Methods in Nursing	Lecture, Interactive Discussion	Short Quiz
10	2	- Apply data collection methods.	Unit 5: Data Collection Methods in Scientific Research	Workshop, Practical Experiments	Practical Exercise, Research Report
11	2	- Identify appropriate data collection methods.	Data Collection Tools (Questionnaires, Interviews)	Lecture, Training Workshop	Practical Exercise Evaluation
12	2	- Understand the sampling process in scientific research.	Unit 6: Sampling and its Methods	Lecture, Case Study Discussion	Short Quiz
13	2	- Identify ethical principles in scientific research.	Unit 7: Ethics in Scientific Research	Case Study, Data Analysis	Evaluation of Ethical Research
14	2	- Understand data interpretation and analysis methods.	-	Workshop, Practical Application	Practical Exercise, Short Quiz
15	2	- Write the final research report.	-	Lecture, Group Discussion	Final Research Report Evaluation

Second Semester

Week	Hours	Learning Outcomes	Unit or Topic Name	Learning Method	Assessment Method
1	2	- Identify the steps of scientific research in nursing.	Unit 1: Introduction to Scientific Research in Nursing	Lecture, Group Discussion	• Short Quiz, Discussion
2	2	- Define concepts and variables in the research problem.	Unit 2: Research Concepts and Variables	Lecture, Case Study	Oral Exam, Exercises
3	2	- Describe the characteristics of scientific research.	Scientific Research Characteristics and Objectives	Presentation, Discussion	Case Analysis Report

4	2	- Identify different types of research methodologies.	Unit 3: Types of Research Methodologies in Nursing	Lecture, Group Work	Short Quiz
5	2	- Understand the basic steps of the scientific research process.	Stages of the Scientific Research Process	Lecture, Practical Workshop	Short Quiz, Homework
6	2	- Identify factors to consider when selecting a research topic.	Formulating a Research Topic in Nursing	Lecture, Case Study Discussion	Short Quiz
7	2	- Identify types of variables in research.	Unit 4: Types of Variables in Scientific Research	Lecture, Interactive Exercises	Short Quiz, Exercises
8	2	- Understand the importance of hypotheses in scientific research.	-	Lecture, Group Discussion	Hypothesis Evaluation
9	2	- Understand research methods and their purpose.	Research Methods in Nursing	Lecture, Interactive Discussion	Short Quiz
10	2	- Apply data collection methods.	Unit 5: Data Collection Methods in Scientific Research	Workshop, Practical Experiments	Practical Exercise, Research Report
11	2	- Identify appropriate data collection methods.	Data Collection Tools (Questionnaires, Interviews)	Lecture, Training Workshop	Practical Exercise Evaluation
12	2	- Understand the sampling process in scientific research.	Unit 6: Sampling and its Methods	Lecture, Case Study Discussion	Short Quiz
13	2	- Identify ethical principles in scientific research.	Unit 7: Ethics in Scientific Research	Case Study, Data Analysis	Evaluation of Ethical Research
14	2	- Understand data interpretation and analysis methods.	-	Workshop, Practical Application	Practical Exercise, Short Quiz
15	2	- Write the final research report.	-	Lecture, Group Discussion	Final Research Report Evaluation

11. Course Evaluation

The semester grade (100) is distributed as follows:

• Coursework: 30%

• Final Exam: 70% • Quizzes: 20% • Participation in Group Discussions: 5 points (5%) • Absence: 5 points (5%)
The final exam (70%) includes a comprehensive evaluation of learning outcomes, covering all course units.

12. Learning and Teaching Resources

• Required textbooks	Required textbooks (methodology if any)
1. **Polit, D. F., & Beck, C. T. (2023).** ***Nursing research: Generating and assessing evidence for nursing practice*** **(12th ed.). Wolters Kluwer Health.** 2. **McDonald, M. L. H. (2022).** ***Introduction to nursing research: Incorporating evidence-based practice*** **(6th ed.). Lippincott Williams & Wilkins.** 3. **Boswell, C., & Cannon, S. C. (2022).** ***Fundamentals of nursing research*** **(6th ed.). Jones & Bartlett Learning.** 4. **Gable, C. M. S., & Grbich, C. S. (2021).** ***Research methods in nursing and health sciences*** **(3rd ed.). Sage Publications.** 5. **Morse, J. M. (2021).** ***Nursing research: A qualitative perspective*** **(6th ed.). Jones & Bartlett Learning.** 6. **Koller, D. L. W. (2021).** ***Ethical issues in nursing research*** **(2nd ed.). Springer.** 7. **O'Rourke, A. (2020).** ***Evidence-based nursing: The research-practice connection*** **(3rd ed.). Prentice Hall.**	Main References (Sources)
1. **Creswell, J. W. (2018).** *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications. 2. **Gray, J. R., Grove, S. K., & Sutherland, S. (2021).** *The practice of nursing research: Appraisal, synthesis, and generation of evidence* (9th ed.). Elsevier. 3. **Polit, D. F., & Beck, C. T. (2020).** *Essentials of nursing research: Appraising evidence for nursing practice* (9th ed.). Wolters Kluwer. 4. **Moule, P., & Goodman, M. (2017).** *Nursing research: An introduction* (4th ed.). Sage Publications. *Scientific Journals:* 1. **Journal of Nursing Research** ○ A specialized journal in nursing research that covers a wide range of topics related to nursing practices and scientific evidence. 2. **International Journal of Nursing Studies** ○ An international journal that publishes research articles on global nursing studies, including	Recommended supporting books and references (scientific journals, reports, etc.)

developments in healthcare practices and clinical research. 3. **Nursing Research** ○ One of the leading journals in nursing that publishes scientific studies related to practical applications and evidence-based practices in nursing. 4. **Journal of Advanced Nursing** ○ An academic journal dedicated to publishing research that enhances nursing practice through scientific evidence and field research. *Government and International Reports:* 1. **World Health Organization (WHO) Reports** 2. **National Institutes of Health (NIH) Reports** 3. **Centers for Disease Control and Prevention (CDC) Reports** ○ CDC reports on infectious diseases, prevention, and the latest research related to public health. .	
• **CINAHL (Cumulative Index to Nursing and Allied Health Literature)** • **PubMed** • **Google Scholar**	Electronic references, websites
▪ Review emerging scientific websites specialized in nursing to keep up with the latest developments in nursing research methodology. ▪ Develop students' skills in designing and conducting nursing research. ▪ Rely on reference books such as *Nursing Research* by Polit & Beck. ▪ Utilize specialized scientific journals like *Journal of Nursing Research* and PubMed to encourage ongoing scientific research.	**Course Development Plan**