T-١٠٤
2024

Course Specification

Course Title: Research Methodology
Course Code: 352 GSC
Program: General Course
Department: General Course
College: Nursing and Health Sciences
Institution: Jazan University
Version: T-104
Last Revision Date: 16/08/2024

Table of Contents:

A. General information about the course:

Course Identification	
1. Credit hours:	
2. Course type	
a.	University ☐ College ☒ Department ☐ Track☐ Others☐
b.	Required ☒ Elective☐
3. Level/year at which this course is offered: 8th level – 3rd year	
4. Course general Description: This course offers an overview of research methodology including basic concepts employed in quantitative and qualitative research methods. This includes identifying and justifying the research problem, formulating achievable research objectives, reviewing the literature, specifying the appropriate study design, designing of the study questionnaire, identifying study population and sample size estimation, identifying methods of data collection, understanding the highest standards of research ethics, statistical analysis, interpretation and dissemination of the results.	
5. Pre-requirements for this course (if any): None	
6. Co- requirements for this course (if any): None	
7. Course Main Objective(s) By the end of this course students should be able to: ١- Describe basic concepts in research and its purposes. ٢- Demonstrate and justify research problems and formulate achievable objectives. ٣- Conduct an effective and comprehensive literature review. ٤- Select the appropriate study design and sampling strategy. ٥- Identify the study population and calculate the sample size. ٦- Identify methods of data collection and decide on study tools. ٧- Determine the proper statistical models required for data analysis. ٨- Interpret and disseminate the results and findings. ٩- Understanding the highest standards of research ethics,.	

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
١.	Traditional classroom	3 hours/ week = 30 hours /semester	100
٢.	E-learning		

No	Mode of Instruction	Contact Hours	Percentage
٣.	Hybrid • Traditional classroom • E-learning		
٤.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
١.	Lectures	20
٢.	Laboratory/Studio	10
٣.	Field	
٤.	Tutorial	
٥.	Others (specify)	
	Total	30

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Identify and understand basic concepts of research methodology and main steps of scientific research.	1.1	Lectures and Group discussion	Midterm and final exam
1.2	Identify and justify different research problems	1.2	Lectures and Group discussion	Midterm and final exam
1.3	Understand study design and theoretical aspects of research	1.3	Lectures and Group discussion	Midterm and final exam
2.0	Skills			
2.1	Conduct a basic Literature review	2.1	Practical work, group discussion and presentation	Midterm and final exam
2.2	Apply unbiased sampling strategies in different study designs.	2.2	Practical work, group discussion and presentation.	Midterm and final exam

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.3	Utilize efficiently different tools and software to conduct a comprehensive literature review and sample size calculation and statistical analysis.	2.3	Practical work, group discussion and presentation	Midterm and final exam
2.4	Develop competitive research proposals.	2.4	Practical work and group discussion	Exams and Assignment
3.0	Values, autonomy, and responsibility			
3.1	Demonstrates professional development and self-learning ability	3.1	Group discussion	Assignment

C. Course Content

No	List of Topics	Contact Hours
١.	**Introduction to Scientific Research:** – Definition of research, Criteria for good research, Steps of the research process from idea to outcome, Characteristics of research, Types of research. .	3
٢.	**Research Problem:** – Definition of the research problem, Criteria for research problem, Formulating research problem, Research Priorities	3
3	**Review of Literature:** – Define the literature review process, Purpose of a literature review, Types of literature reviews, State-of-the-art, Sources of literature review, Common mistakes to avoid, Approaches.	3
4	**Research Objectives and Hypotheses:** - Formulation of achievable objectives for the research project, Define and describe the difference between general and specific objectives, characteristics of research objectives	3
5	**Study Design: Part 1**	3

	- Different designs related to Observational Study: cross-sectional, case-control, cohort	
6	**Study Design: Part 2** - - Different designs related to Experimental Study: Randomized control trials, None RCT, Crossover	3
7		3
8	**Sampling:** -Sample size calculation, Sampling strategies, Sampling technique	3
9	**Methods of Data Collection:** -Types of Data, Data Quality Assurance, clinical, fieldwork, in-vivo, in-vitro, questionnaire design, laboratory methods, measurements, data gathering, etc	3
10	**Data analysis, Interpretation & Reporting: Part 1** - Type of analysis, Software, Descriptive analysis, Inferential analysis, -	3
11	**Data analysis, Interpretation & Reporting: Part 2** - Measures of frequency, relationship & associations, Measures of risk, - Data reporting: Tables, Figures, Maps,	3
12	**Important Topics in Research: Part 1** Research Ethics, human, animal, genomic materials, ethical approval	3
13	**Important Topics in Research: Part 2** Evidence-Based Medicine, decision making, meta-analyses, systematic reviews, randomized controlled trials.	3
14	**Important Topics in Research: Part 3** - Plagiarism, definition, types, detection, consequences.	3
15	Revision	3
Total		30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
١.	Midterm theory	7	20 %
٢.	Student Discipline & Behavior		5 %
٣.	Practical lab manual	Weekly	15%
٤.	Assignment	15	20 %
٥.	Final theory	16	40 %

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
٦.			
	Total	-	100%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Creswell, J. W. 2013. Research design: Qualitative, quantitative, and mixed methods approach (4th Ed.). Thousand Oaks, CA: Sage
Supportive References	N/A
Electronic Materials	N/A
Other Learning Materials	N/A

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Class room
Technology equipment (Projector, smart board, software)	Show data Smart board Pc with Microsoft windows and Microsoft office
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Course evaluation survey. Individual interviews with the students.	Students	Direct
Updating the lecture every semester to include recent updates in the area of blood bank to improve the teaching	Course instructor	Direct
Revision standards of course exam papers	Departmental exam committee	Direct

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	