



T-104
2022

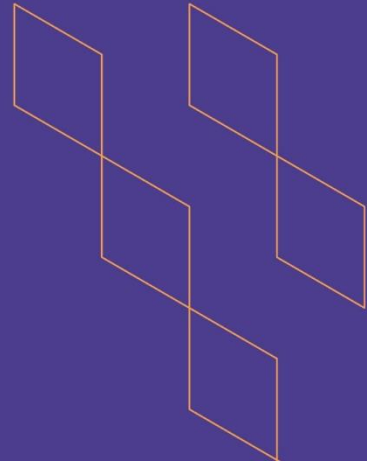
Course Specification





T-104
2022

Course Specification



Course Title:	Research Methodology
Course Code:	454-PHP-2
Program:	Pharmaceutical Sciences
Department:	Clinical Pharmacy
College:	College of Pharmacy
Institution:	Najran University
Version:	
Last Revision Date:	18/12/2023



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A. General information about the course:

Course Identification	
1. Credit hours:	2
2. Course type	
a.	University <input type="checkbox"/> College <input type="checkbox"/> Department <input type="checkbox"/> Track <input type="checkbox"/> Others <input checked="" type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered:	8 th Level/ 4 th Year
4. Course general Description This course is designed to introduce the students to the aspects of optimizing research methodologies/methods for clinical and translational research. It will help them to value the importance of research in promoting their profession. Students will develop basic knowledge about the ethics in research, the research article, the structure of research question and the searching of evidence in research literature.	
5. Pre-requirements for this course (if any): None.	
6. Co- requirements for this course (if any): None.	
7. Course Main Objective(s) Upon completing this course, students will be able to:	
<ul style="list-style-type: none"> • Understand research as a way of examining the practice. • Outline processes for conducting pharmaceutical research. • Identify the ethical considerations for human and animal research subjects. • Formulate an answerable clinical question. • Develop a search strategy to identify literature relevant to research question. • Compare and contrast the advantages and disadvantages of research designs and methods. • Critically appraise published literature. 	

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	30	100
2.	E-learning		
3.	Hybrid <ul style="list-style-type: none"> • Traditional classroom • E-learning 		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	
3.	Field	0
4.	Tutorial	0
5.	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	Demonstrate specialized knowledge and understanding in research methodology in relation to different research approaches, designs and methods.	K1	Lectures, group discussion	1. Written exam/ quiz 2. Assignment
1.3	Demonstrate knowledge of the evidence-based medicine and different levels of research evidence.	K3	Lectures, group discussion	1. Written exam/ quiz 2. Assignment
2.0	Skills			
2.2	Evaluate, critically appraise and interpret different sections of a research paper	S2	Lectures, data interpretation exercises	Written exam/ quiz
2.4	Utilize appropriate information technologies and search strategies to identify literature relevant to a research question	S4	Lectures, Laboratory work	1. Written exam/ quiz 2. Presentation
2.5	Communicate clearly and effectively in a collaborative manner with other students and staff members.	S5	Lectures, group discussion	1. Written exam/ quiz 2. Presentation
3.0	Values, autonomy, and responsibility			
3.1	Demonstrate highest standards of pharmacy research ethics and legal behavior.	V1	Lectures, Presentation	Written exam/ quiz
3.3	Engage in self-learning practices and inter-professional healthcare education activities	V3	Lectures, Presentation	Written exam/ quiz
3.4	Demonstrate accountability, confidence, and independent thinking, in addition to team working skills	V4	Lectures, Presentation	Written exam/ quiz

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to research methodology	2
2.	Pharmaceutical research ethics	2
3.	Types of clinical research	2
4.	The research problem identification & formulation (research question)	2
5.	Literature review (search strategy)	2
6.	Clinical study design	3
7.	Research hypotheses	1
8.	Data collection methods	2



9.	Sampling	2
10.	Measurement	2
11.	Data analysis	4
12.	Data presentation & interpretation	2
13.	Paper writing	2
13.	Structure of a scientific paper	2
Total		30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz	Class tests	10%
2.	Midterm exam	6-7	25%
3.	Presentation	8	15%
4.	Assignments	10	10%
6.	Final exam	12-13	40%
7.	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	<ol style="list-style-type: none"> 1. Guyatt G, Rennie D, Meade MO, Cook DJ. Users' Guide to the Medical Literature. 3rd ed. New Jersey, USA: McGraw-Hill Education; 2015. 2. Creswell J. Research design. 4th ed. California: SAGE Publications; 2014.
Supportive References	<ol style="list-style-type: none"> 1. Bowling A. Research methods in health. 4th ed. England: Open University Press; 2014.
Electronic Materials	http://jamaevidence.mhmedical.com/book.aspx?bookID=847
Other Learning Materials	Micromedex and youtube.com

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	A Lecture containing at least 25 seats
Technology equipment (projector, smart board, software)	<ul style="list-style-type: none"> • Computer lab • Internet access
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Head of departments and students	Indirect Questionnaires (indirect)
Effectiveness of students assessment	Faculty members and students	Indirect Questionnaires (indirect)
Quality of learning resources	Student Peer reviewer	Direct Indirect
The extent to which CLOs have been achieved	Students	Questionnaires (Indirect)
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	

