

Republic of Yemen
Ministry of Higher Education & Scientific Research
21 September University for Medicals and Applied Sciences



Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Specification of Practical-based Research Project

Course No. (02.01.226)

2022

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Prof. Ali Alkaf	Dr. Abdulelah Thabet	Dr. -----	Dr. Abdulelah Thabet	Dr. Ali Alyahawi

I. Course Identification and General Information:

1	Course Title:	Research Project			
2	Course Code & Number:	02.01.226			
3	Credit Hours:	Credit Hours	Theory Hours		Lab/.Practical Hours
			Lecture	Exercise	
		1	Through Research Work Period		
4	Study Level/ Semester at which this Course is offered:	Level 5/ Semester 2			
5	Pre –Requisite (if any):	Medical statistics & Research methodology			
6	Co –Requisite (if any):	None			
7	Program (s) in which the Course is Offered:	Bachelor of Clinical Pharmacy & Pharm. D.			
8	Language of Teaching the Course:	English			
9	Study System:	Semester based System			
10	Mode of Delivery:	Full Time			
11	Location of Teaching the Course:	Faculty of Clinical Pharmacy			
12	Prepared by:	Prof. Ali Alkaf			
13	Date of Approval:	2022			

II. Course Description:

The course content is designed to improve students' knowledge and skills in order to use properly and efficiently quantitative and qualitative methods during conducting scientific graduation research work. This course will provide an overview of the important concepts of research design, data collection, statistical and interpretative analysis, and final report presentation.

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III. Course Intended Learning Outcomes (CILOs)		Referenced PILOs Learning out of program
A. Knowledge and Understanding: Upon successful completion of the course, students will be able to:		
a.1	Define the types of research designs, their advantages, and drawbacks.	A1, A4
a.2	Discuss the research tools and methods of data collection	A4
B. Intellectual Skills: Upon successful completion of the course, students will be able to:		
b.1	Construct a research question, develop a hypothesis, and select the most appropriate research method, data collection tools for the question of interest, and data entry platform.	B4, B5
b.2	Analysis evidence-based literature to answer question of interest.	B4
C. Professional and Practical Skills: Upon successful completion of the course, students will be able to:		
c.1	Use properly the most appropriate knowledge, techniques, and skills in preparing a research.	C4
c.2	Present written research work correctly and using data to make rationale clinical decisions	C4, C5
D. Transferable Skills: Upon successful completion of the course, students will be able to:		
d.1	Improve students skills of time management and self-learning during performing research works.	D1, D2
d.2	Communicate effectively and ethically with his/her colleagues	D1

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(A) Alignment of Course Intended Learning Outcomes (Knowledge and Understanding) to Teaching Strategies and Assessment Methods:			
Course Intended Learning Outcomes		Teaching Strategies	Assessment Strategies
a.1	Define the types of research designs, their advantages, and drawbacks.	- Weekly discussions - Self-reading articles - Textbooks	Assignments
a.2	Discuss the research tools and methods of data collection	- Weekly discussions - Self-reading articles - Textbooks	Assignments
(B) Alignment of Course Intended Learning Outcomes (Intellectual Skills) to Teaching Strategies and Assessment Methods:			
Course Intended Learning Outcomes		Teaching Strategies	Assessment Strategies
b.1	Construct a research question, develop a hypothesis, and select the most appropriate research method, data collection tools for the question of interest, and data entry platform.	- Weekly discussions - Self-reading articles - Feed-back learning - Textbooks	Assignments and written report
b.2	Analysis evidence-based literature to answer question of interest.	- Weekly discussion - Self-reading articles - Textbooks	Assignments and written report
(C) Alignment of Course Intended Learning Outcomes (Professional and Practical Skills) to Teaching Strategies and Assessment Methods:			
Course Intended Learning Outcomes		Teaching Strategies	Assessment Strategies
c.1	Use properly the most appropriate knowledge, techniques, and skills in preparing a research.	- Weekly discussions - Self-reading articles - Feed-back learning - Textbooks	Oral presentation and written report
c.2	Present written research work correctly and using data to make rationale clinical decisions	- Weekly discussions - Self-reading articles - Feed-back learning	Oral presentation and written report
(D) Alignment of Course Intended Learning Outcomes (Transferable Skills) to Teaching Strategies and Assessment Methods:			
Course Intended Learning Outcomes		Teaching Strategies	Assessment Strategies

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d.1	Improve students skills of time management and self-learning during performing research works.	- Weekly discussions - Self-reading articles - Seminars	Oral presentation and written report
d.2	Communicate effectively and ethically with his/her colleagues	- Weekly discussions - Self-reading articles - Seminar	Oral presentation

I. Topic Outline and Schedule:

This course has general framework and objectives. However, the timetable is both project- and instructor-dependent. The following timetable represents an example:

Order	Units/Topics List	Number of Weeks	Contact hours	Aligned CILOs
1	Introduction: Development of specific research question, literature search	Week 1	Week 1	a 1, a2
2	Study design and methodologies in clinical research, design of data collection tools	Week 2	Week 2	b 1, b2
3	Data collection and entry	Week 3-5	Week 3-5	c1, c2
4	Sample statistical analysis	Week 6	Week 6	b 1, b2
5	Written research project submission	Week 7	Week 7	a 1, a2, b1, b2, d1
6	Oral presentations	Week 8	Week 8	d 2

II. Teaching strategies of the course:

- Written research project
- Oral Discussions
- Feed-back learning
- Homework and assignments
- Oral Presentation

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III. Schedule of Assessment Tasks for Students During the Research Work:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Attitude and attendance	Week 1-8	5	5 %	a 1, a2, b1, b2, d, d2
2	Weekly discussions	Week 1-8	5	5 %	a 1, a2, b1, b2, d, d2
3	Final written research project	Week 12	20	20 %	a 1, a2, b1, b2, d1
4	Oral presentation (PPT)	Week 14	20	20 %	d 2
Total (Project supervisor Mark)			50	50 % (of Total)	

Each project will be assessed by a committee of three member as following:

Items	Weight
Project supervisor	50 %
Internal examiner : a member of the department teaching stuff.	25 %
external examiner : a qualified external examiner from another university	25 %
Total	100

Assessment of the project by the project supervisor

Items	Mark
Attitude and attendance	5
Weekly discussions	5
Final written research project	20
Oral presentation	20
Total	50

Assessment of the project by the internal examiner

Items	Mark ¹
Research methodology	5
Research writing	10
Presentation	5
Discussion	5
Total	25

¹: The research project group will be assessed as one unit

Assessment of the project by the external examiner

Items	Mark ¹
Research methodology	5
Research writing	10
Presentation	5
Discussion	5
Total	25

¹: The research project group will be assessed as one unit

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IV. Learning Resources:

- Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).

1- Required Textbook(s) (maximum two).

Variable

2- Essential References.

- Hulley S. B., Cummings S. R., Browner W. S., et al. (2013). Designing Clinical Research. 7th Edition. Pennsylvania, USA: Lippincott Williams & Wilkins.
- Friedman L. M., Furberg C.D., DeMets, D. L., (2010). Fundamentals of Clinical Trials. 4th edition. New York, USA. Springer.

3- Electronic Materials and Web Sites etc.

Selected Journal articles depending on the project

I. II. Course Policies:

General Requirements:

Each 10 students group is assigned to do an experimentation research supervised by a supervisor of the department teaching staff or outside the college.

➤ The title of research can be suggested by :

- The supervisor
- Or the students after supervisor evaluation and acceptance

➤ The research subject must be approved by the college and the department of the university then by the setting of practicing research if outside of the university for patient care researches

➤ Experiments are carried out in the college laboratories or outside the college if necessary.

➤ The research is to be carried out with the period of the course study (8 weeks) and must be delivered to the department within that period.

Course Attendance:

Attendance is mandatory.

Other policies:

The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of preparing the research set by the Department, Faculty and University Administration.

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Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Plan (Syllabus) of **Research Project** Course Code. 02.01.226

I. Information about Faculty Member Responsible for the Course:									
Name of Faculty Member:	Abdullelah Thabet			Office Hours					
Location& Telephone No.:									
E-mail:				SAT	SUN	MON	TUE	WED	THU

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(B) Alignment of Course Intended Learning Outcomes (Intellectual Skills) to Teaching Strategies and Assessment Methods:

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	research method, data collection tools for the question of interest, and data entry platform.	- Feed-back learning - Textbooks	
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