

Republic of Yemen

Ministry of Higher Education & Scientific Research

21 SEPTEMBER UNIVERSITY for MEDICALS & APPLIED
SCIENCES



Faculty of Medicine

Bachelor Program of Medicine and Surgery

Course Specification of

Graduation Research

Course Code. (A21P525)

2023



T4: This Template is Developed and Approved by CAQA-Yemen, 2023

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Assoc. Prof. Abdulbasit Alghoury	Assoc. Prof. Mohammed Al-cyrani		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

I. General Information:

1.	Course Title:	Graduation Research				
2.	Course Code:	A21P525				
3.	Credit Hours:	Credit Hours	Theory Contact Hours		Practical Contact Hours	
			Lecture	Tutorial/ Seminar	P	Clinical
		3	--	9	-	--
4.	Level/ Semester at which this Course is offered:	5 th Level / 2 nd Semester				
5.	Pre –Requisite (if any):	Research Methodology				
6.	Co –Requisite (if any):	None				
7.	Program (s) in which the Course is Offered:	Bachelor of Medicine and Surgery (MBBS)				
8.	Language of Teaching the Course:	English				
9.	Location of Teaching the Course:	Faculty of Medicine				
10.	Prepared by:	Associate Prof. Abdulbasit Alghoury				
١١	Date and Number of Approval by Council:	2023				

II. Course Description:

The course focus on accepting student an experienced in suggestion and performing research topic related to medicine, and enrolment within a teamwork in multi-disciplinary research projects. Graduation research is under-supervision training course of research project from designing to implementation and reporting within different medical fields. The process of education and training in conduction is start by problem definition, hypothesis formulation, design a plan for hypothesis testing or plan of survey research application. After data gathering, the student will be trained on proper methods of results presentation, then scientific discussion of these results. Conclusions and recommendations will be formulated.

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III. Course Intended Learning Outcomes (CILOs) : Upon successful completion of the course, students will be able to:		Referenced PILOs		
A. Knowledge and Understanding:		I, P or M/A		
a1	Demonstrate knowledge on the construction and the different types of medical research studies	I	A1	Describe the general and basic sciences related to human body structure and functions with emphasis on normal and abnormal conditions.
a2	Identify the ethical issues involved in conducting medical researches	I	A4	Explain the pathological and pathogenesis changes in various diseases, and their etiological triggers including genetic, developmental, infectious, metabolic, endocrinal, autoimmune, neoplastic, traumatic, degenerative and occupational factors.
B. Intellectual Skills:				
b1	Formulate scientific research question and design research methodology based on correct selection from alternative methods	M	B3	Explore to medical practice the principles, method and knowledge of population health and the improvement of health and healthcare.
b2	Analysis evidence-based literature to answer question of interest.	M	B2	Analyze and interpret the finding from history, clinical examination and investigations to propose a diagnosis and develop a shared management plan for common acute, chronic and urgent physical and mental health presentations.
C. Professional and Practical Skills:				
c1	Implement data gathering tools including questionnaires, valid sampling, field	A	C1	Perform complete clinical examination and precise

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	survey collection, data analysis, data presentation, and discussion of these results			investigations to reach the final diagnosis
c2	Conduct medical/ clinical experiments in an accurate precise manner.	A	C3	Carry out routine medical procedure and demonstrate the ability of using common medical tools required for diagnosis and management with highly qualified competency.
D. Transferable Skills:				
d1	Show skills of oral and written presentations for research tasks.	M	D1	Communicate with professionals, patients, their families and the community through verbal, written and other non-verbal means.
d2	Develop the capability to work independently or in team with a problem-solving orientation	M	D2	Work individually or in a team and develop lifelong learning using up to date technology that help in understanding the diseases and its control and prevention.
I= Introduced, P=Practiced or M/A= Mastered/Advanced				

(A) Alignment of Course Intended Learning Outcomes (Knowledge and Understanding) to Teaching Strategies and Assessment Methods:

Course Intended Learning Outcomes		Teaching Strategies	Assessment Strategies
a1	Demonstrate knowledge on the construction and the different types of medical research studies	- Seminars - Discussion - Office Hours - Self learning	Research
a2	Identify the ethical issues involved in conducting medical researches	- Seminars - Discussion - Office Hours - Self learning	Research

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(B) Alignment of Course Intended Learning Outcomes (Intellectual Skills) to Teaching Strategies and Assessment Methods:			
Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies	
b1	Formulate scientific research question and design research methodology based on correct selection from alternative methods	<ul style="list-style-type: none"> - Practical Session - Seminars - Discussion - Self Learning 	Research
b2	Analysis evidence-based literature to answer question of interest.	<ul style="list-style-type: none"> - Practical Session - Discussion - Self Learning 	Research
(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	
c1	Implement data gathering tools including questionnaires, valid sampling, field survey collection, data analysis, data presentation, and discussion of these results	<ul style="list-style-type: none"> - Practical Session - Seminars - Discussion - Self Learning 	Research
c2	Conduct medical/ clinical experiments in an accurate precise manner.	<ul style="list-style-type: none"> - Practical Session - Seminars - Discussion - Self Learning 	Research
(D) Alignment of Course Intended Learning Outcomes (Transferable Skills) to Teaching Strategies and Assessment Methods:			
Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies	
d1	Show skills of oral and written presentations for research tasks.	<ul style="list-style-type: none"> - Seminars - Discussion - Presentation 	Research Oral Discussion
d2	Develop the capability to work independently or in team with a problem-solving orientation	<ul style="list-style-type: none"> - Seminars - Discussion - Presentation 	Research Oral Discussion

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IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	NA				
Number of Weeks /and Units Per Semester					

B. . Practical Aspect:

No.	Tutorial	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	NA			
Number of Weeks /and Units Per Semester				

C. Tutorial Aspect (if any):

No.	Tasks/ Experiments	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	Introduction to research projects.	1	3	a1, a2, b1, b2, c1, d1, d2
2	Problem formulation	1	3	a1, b2, d1, d2
3	Reviewing literature	1	3	a1, b1, b2, d1
4	Develop research proposal	1	3	a1, a2, b1, b2, d1
5	Conducting the research	6	18	a1, a2, b1, c1, c2, d2
6	Presenting results in Tables and Figures.	1	3	a1, , b2, c1, d1, d2
7	Discussion of results	1	3	a1, b1, b2,

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No.	Tasks/ Experiments	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
				c1
8	Source Citation	1	3	a1, a2, b1, b2
9	Presentation of research project	2	6	a1, a2, b2, c1, d1, d2
10	Jury of research project: <input type="checkbox"/> Final presentation <input type="checkbox"/> Oral examination <input type="checkbox"/> Final Report	1	3	a1, a2, b1, b2, c1, d1, d2
Number of Weeks /and Units Per Semester		16	48	

VII. Assignments:

No.	Assignments	Week Due	Mark	Aligned CILOs (symbols)
1	Assignment 1: Research Project	1 th -15 th	70	a1, a2, b1, b2, c1,c2, d1, d2
Total				

VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Research Project	1 th -15 th	70	70%	a1, a2, b1, b2, c1,c2, d1, d2
2	Oral Discussion	16 TH	30	30%	d1, d2
Total			100	100%	

IX. Learning Resources:

1- Required Textbook(s):

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- 1- Turabian, K.L. (2013). A Manual for Writers of Research Papers, Theses, and Dissertations.(8th ed.). Chicago: University of Chicago Press.
- 2- Creswell, J. W. (2019). Educational Research: Planning, conducting and evaluating quantitative and qualitative research (6th ed.).

2- Essential References:

- 1- Creswell, J. W. (2018). Qualitative inquiry and research design: Choosing among five approaches. (4th ed.). London:
- 2- Gay, L. R., Mills, G. E., & Airasian, P. (2018). Educational research: Competencies for analysis and applications (12th ed.). NJ: Pearson.
- 3- Cleland, J., and Durning S. 2015. Researching Medical Education. Oxford, UK: Wiley

3- Electronic Materials and Web Sites etc.:

SPSS software

Websites:

CDC, Center of disease control and prevention

<https://www.cdc.gov>

Pubmed

<https://www.ncbi.nlm.nih.gov/pubmed/>

Medical Books

<http://booksformedicine.blogspot.com/>

Hinari

<https://www.who.int/hinari/en/>

www.WHO

X. Course Policies: (Based on the Uniform Students' By law (2007))

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.

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4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Forgery and Impersonation: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.

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Faculty of Medicine

Bachelor Program of Medicine and Surgery

Course Plan (Syllabus) of

Graduation Research

Course Code. (A21P525)

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

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II. Course Identification and General Information:

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Course Code:	A21P525				
Credit Hours:	Credit Hours	Theory Contact Hours		Practical Contact Hours	Clinical
		Lecture	Tutorial/Seminar	P	
	3	--	9	-	--
Level/ Semester at which this Course is offered:	5th Level / 2nd Semester				
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Co –Requisite (if any):	None				
Program (s) in which the Course is Offered:	Bachelor of Medicine and Surgery (MBBS)				
Language of Teaching the Course:	English				
Location of Teaching the Course:	Faculty of Medicine				
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IV. Course Intended Learning Outcomes (CILOs) :

Upon successful completion of the Course, student will be able to:

A. Knowledge and Understanding:

a1. Demonstrate knowledge on the construction and the different types of medical research studies

a2. Identify the ethical issues involved in conducting medical researches

B. Intellectual Skills:

b1. Formulate scientific research question and design research methodology based on correct selection from alternative methods

b2. Analysis evidence-based literature to answer question of interest.

C. Professional and Practical Skills:

c1. Implement data gathering tools including questionnaires, valid sampling, field survey collection, data analysis, data presentation, and discussion of these results

c2. Conduct medical/ clinical experiments in an accurate precise manner.

D. Transferable Skills:

d1. Show skills of oral and written presentations for research tasks.

d2. Develop the capability to work independently or in team with a problem-solving orientation

IV. Course Contents:

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No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
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Number of Weeks /and Units Per Semester				

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B. . Practical Aspect:

No.	Tutorial	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
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C. Tutorial Aspect (if any):

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No.	Tasks/ Experiments	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
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VII. Assignments:

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Other policies:

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