Course Specification

(Postgraduate Programs)

Course Title:	**Project Planning and Proposal Writing**
Course Code:	**BIO-6391**
Program:	**Master of Science in Applied Biology (Cell and Molecular Biology)**
Department:	**Biology**
College:	**Science**
Institution:	**Imam Mohammed Ibn Saud Islamic University**
Version:	**1**
Last Revision Date:	*Pick Revision Date.*

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A. General information about the course:

1. Course Identification:

1. Credit hours: (Lecture 2 + Lab 0)				
2. Course type				
A.	☐University	☐College	☐Department	☒ Track
B.	☒ Required		☐Elective	
3. Level/year at which this course is offered: (Level 3/ second year)				
4. Course General Description:				
This graduate course is designed to provide the students with the basic guidelines for writing research proposals and planning research projects. The course focuses on the key points that render the proposal and project plan in an integrated form which undoubtedly reflect the outcomes of the intended research work. The course content emphasizes that proposal writing and project planning are an aforethought process that requires employing background knowledge and writing skills. It is explained that the proposal should reveal the biological problem in question and how this problem is addressed through performing the research work. It is stressed in the course content that the expected research outcomes should be clarified in the proposal objectives. It also emphasizes the additive impact of the anticipated research results on the current knowledge in the relevant biology disciplines. The course explains how project planning is strongly related to the quality of proposal writing.				
5. Pre-requirements for this course (if any)**:**				
None				
6. Co-requirements for this course (if any)**:**				
None				
7. Course Main Objective(s):				
The course's main objectives are centred on the process of proposal writing and project planning. The course aims to equip the students with the necessary knowledge and the required skills to reach a well-written research proposal and a well-planned research project. Elements of a high-quality proposal and fundamentals of an integrated project plan are key objectives of the course. The course aims also encompass paying the student attention to the importance of involving the biological problem that needs to be addressed in the proposal content. In addition, the course aims to provide the students with the skills necessary to plan a well-organized research project to address the problem in question using the most convenient research tools.				

2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	√	100%
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours: (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	30
2.	**Laboratory/Studio**	-
3.	**Field**	-
4.	**Tutorial**	-
5.	**Others (specify) .....**	
	Total	30

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

Code	Course Learning Outcomes	Code of CLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	**Describe the major considerations in writing an acceptable research proposal in compliance with the relevant biology speciality**	**K1**	-Two-hour credit lectures -Demonstrations -Tutorials	-Assignments -Reports -Data Search -Participations -Written exams
1.2	**Outline the proposal elements and the finalizing steps to**	**K2**	-Two-hour credit lectures -Demonstrations	-Assignments -Reports -Data Search

Code	Course Learning Outcomes	Code of CLOs aligned with the program	Teaching Strategies	Assessment Methods
	submit a research proposal as a crucial step preceding conducting a research work		-Tutorials	-Participations -Written exams
1.3	**Explain the key points in planning a research project and how to maintain the research integrity**	**K3**	-Two-hour credit lectures -Demonstrations -Tutorials	-Assignments -Reports -Data Search -Participations -Written exams
2.0	Skills			
2.1	**Employ the acquired knowledge, critical thinking, and skills to reach a well-written research proposal**	**S1**	-Two-hour credit lectures -Demonstrations -Tutorials -Class discussions	-Assignments -Reports -Data Search -Participations -Presentations -Written exams
2.2	**Design a well-planned research project and select the most convenient research methods and techniques to solve a biological problem**	**S2**	-Two-hour credit lectures -Demonstrations -Tutorials -Class discussions	-Assignments -Reports -Data Search -Participations -Presentations -Written exams
2.3	**Relate between the plan of the project and the objectives of the approved research proposal**	**S3**	-Two-hour credit lectures -Demonstrations -Tutorials -Class discussions	-Assignments -Reports -Data Search -Participations -Presentations -Written exams
3.0	**Values, autonomy, and responsibility**			
3.1	**Perform research work independently and cooperate effectively with a teamwork**	**V1**	-Group discussions	-Reports -Presentations
3.2	**Communicate scientific issues**	**V2**	-Group discussions	-Reports -Presentations

Code	Course Learning Outcomes	Code of CLOs aligned with the program	Teaching Strategies	Assessment Methods
	professionally with peers and present a research proposal clearly as an oral presentation or written format			
3.3	**Adhere to the relevant ethical rules while writing a proposal or planning a research project**	**V3**	-Group discussions	-Reports -Presentations

C. Course Content:

No	List of Topics	Contact Hours
1.	**Objectives of a Research Proposal Writing:** -Showing how the intended research work fits into the topic of research -Clarifying the biology question(s) that will be answered -Explain what findings will be added to the current knowledge	**4**
2.	**Proposal Narrative:** Generation of an outline, choosing a meaningful title, and resources	**4**
3.	**Essential Proposal Elements (Composing a research proposal):** -A discernible logic flow from the introduction to references -Title, introduction, background literature, objectives (goal statement), experiment or field study, materials, methods and techniques, analysis of results, expected outcomes, references, and appendices (documents supporting proposal)	**4**
4.	**Enhancing the Impact of a Research Proposal:** -Showing an in-depth understanding of the existing literature -Employing writing skills and using diagrammatic representations -Preparing research proposal to be persuasive and achievable	**4**
5.	**Utilizing the Relevant Resources:** Utilizing the resources to prepare a research proposal (internet resources, search engines, textbooks, etc.)	**4**
6.	**Finalizing the proposal format and proposal submission:** Proofreading and editing of the proposal draft	**2**
7.	**Proposal Evaluation and Approval:** -Convincing evaluators about the significance and outcomes of the intended research work	**4**

	- Obtaining approvals from various evaluation committees	
8.	**Planning Research Project:** Project objectives, background knowledge, design of experiment or field study, methods, analysis tools, showing results, and discussing findings	**4**
Total		**30**

D. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	**Midterm exam-1**	5th week	20%
2.	**Midterm exam-2**	10th week	20%
3.	**Attendance, assignments, reports, presentations, participation**	Throughout the course duration	20%
...	**Final exam**	16th week	40%

*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	-Your Research Project Designing, Planning, and Getting Started. 2018. Nicholas Walliman. 4th Ed. Oxford Brookes University, UK. ISBN: 1526441209 -General Guide to Writing Research Proposal. 2019. Oso WY, -Onen D. The Jorno Kenyatta Foundation. ISBN: 9789966227164 -Research Projects and Research Proposals. 2009. A Guide for Scientists Seeking Funding. Paul G. Chapin. ISBN: 9780511500084
Supportive References	http://www.libguides.usc.edu/writingguide . https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5037942/
Electronic Materials	
Other Learning Materials	

2. Educational and Research Facilities and Equipment Required:

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom
Technology equipment (Projector, smart board, software)	Projector, smart board
Other equipment (Depending on the nature of the specialty)	

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Student	Indirect
Effectiveness of students' assessment	Faculty	Direct
Quality of learning resources	Faculty	Direct
The extent to which CLOs have been achieved	Faculty	Direct
Other		

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

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

-	**BIOLOGY DEPARTMENT COUNCIL**
REFERENCE NO.	**23**
DATE	**23/8/1445**