هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title: Graduation Project
Course Code: **BIOL491**
Program: **Biology**
Department: **Biology**
College: **Science**
Institution: **Jazan University**
Version: **4**
Last Revision Date: 2nd semester 2022

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: Level 11 – 4th Year					
4. Course general Description - The Graduation Project course was designed to assist the students understand the basic principles of writing scientific researches, and supported with a practical work in the department laboratories, allowing the students to practice the real experience of writing the scientific researches, in different designs and styles. - This course describes some of the special topics like exploring the scientific methods to study qualitative research. The course will help the students to know what is meant by the "scientific method" and to critically evaluate its strengths and weaknesses as a mean of obtaining knowledge about their field. It will also teach them how to progress from a general research question to the formulation of a tight, well-constructed, and researchable question and command the various methods of data collection used most frequently in the human sciences and design research. .					
5. Pre-requirements for this course (if any): None					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) • Have an introduction for Research Definition, Problems, Hypothesis and Questions • Participate in single and group discussion and workshop for research aims and smart objectives • Conduct a practical application for the different types of research study designs • Discuss principles of Research Ethics and Law from the practical point of view • Understand the writing of a research proposal with the essential elements. • Participate in Basic research statistics. • Identify priority problems for research • Implement data analysis and presentation • Develop data collection tools • Implement simple research studies • Prepare research proposal and research reports					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	10	77%
2.	E-learning	1	7.7%
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning	1	7.7%

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	11
2.	Laboratory/Studio	22
3.	Field	
4.	Tutorial	
5.	Others (self learning)	2
	Total	35

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	Apply your knowledge of biological science to solve some applied techniques and problems.	K 3-1	Lectures. Essay Assignments	Assignments.
2.0	Skills			
S 1-2	Apply the theoretical knowledge and understanding in laboratory experiments and techniques	Reports and, Homework.	experiments	S 1-2
S 2-1	Predict the results of some biological problems and experiments	Web-based Assignments	experiments	S 2-1
S 2-3	Set-up an experiment, investigation and research project for complex issues and problems in Biology.	Lectures and practical	experiments	S 2-3
S 3-1	Design a biological experiment and procedures in laboratory or in the field or even theoretically	Homework and practical	Homework	S 3-1
S 3-3	Write a report about any practical or theoretical tasks related to biological science.	Reports and, Homework.	Homework.	S 3-3
S 4-3	Prepare well-organized written scientific document, using appropriate media, with introduction, body, and conclusions	Lectures	Assignments	S 4-3
3.0	Values, autonomy, and responsibility			
V 1-1	Integrate prior knowledge of biological technology along with new knowledge in the profession for the sake of self-continuing professional development.	Lectures	Presentation	V 1-1
V 3-2	Develop competencies in critical thinking, delivering scientific information, reporting and data analysis.	Lectures	reporting and data analysis	V 3-2

C. Course Content

No	List of Topics	Contact Hours
1	Introduction (what is a research project), area of study, research project structure, title of the project.	1
2	Types of scientific research, The goal of research and scientific publishing	1
3	The main steps in preparing a research paper for publication, Some types of scientific writing	1
4	The main steps in preparing a research paper for publication	1
5	How to write and produce research papers, Ethics and values of scientific research	1
6	Citation (Plagiarism), Religious perspective on the ethics of scientific research	1
7	Mechanisms for controlling the ethics of scientific research	1
8	Writing essay. Revision of the project (research)	1
9	Submit the research to the Scientific Research Committee	1
10	Public discussion of the research	1
Total		11

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Periodic Exams and Quizzes	7	25%
2.	Assignments, and Classroom Activities	8	25%
3.	Final exam (oral presentation and project evaluation)	10	50%

*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	- Dawah H. A., 2015(1436H), A comprehensive guide to writir defending scientific projects, Jazan University Departme Scientific Publishing and Printing Press, Indexing of King National Library during publication.
Supportive References	➢ Abu Soliman, A.,I.,(1423):Writing the Scientific Research.El- Roushed .press.KSA. ➢ Chris A. Mack (2018), How to Write a Good Scientific Paper. SPIE press, Washington, USA.

Electronic Materials	WWW.WHO.COM - http://medent.usyd.edu.au
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	1 Lecture room(s) for groups of 25 students. 1 Laboratory for group of 15 students
Technology equipment (projector, smart board, software)	AV, data show, Smart Board
Other equipment (depending on the nature of the specialty)	Light microscopes, glassware, chemicals, consumables

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students, Faculty	Direct (Questionnaire)
Effectiveness of students assessment	Peer Reviewer	Direct (Cross Check marking)
Quality of learning resources	QA. Committee	Indirect (Benchmarking)
The extent to which CLOs have been achieved	Program Leader	Indirect (QA Committee)
Other		

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

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Biology Department Board
REFERENCE NO.	
DATE	