Course Specifications

Course Title:	**Graduation Project**
Course Code:	**491BOT**
Program:	**Biology**
Department:	**Biology**
College:	**Science**
Institution:	**Jazan University**

Table of Contents

A. Course Identification

1. Credit hours:	**2h**
2. Course type	
a. University ☐ College ☐ Department ☑ Others ☐	
b. Required ☑ Elective ☐	
3. Level/year at which this course is offered:	**Level 7/Year 4**
4. Pre-requisites for this course (if any)**: Completion of Level 6 courses**	
5. Co-requisites for this course (if any)**: None**	
6. Name of Faculty member responsible for the course: Biology Dept. Teaching Staff	

6. Mode of Instruction

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	28h	%100
2	**Blended**	-	-
3	**E-learning**	-	-
4	**Correspondence**	-	-
5	**Other**	-	-

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	**Lecture**	**30**
2	**Laboratory**	**30**
3	**Tutorial**	-
4	**Others** (specify)	-
	Total	**60**
Other Learning Hours*		
1	**Study**	**20**
2	**Assignments**	**10**
3	**Library**	**5**
4	**Projects/Research Essays/Thesis** Field Trips	- **15**
5	**Others** (specify)- Exam preparation (mid & final)	**10**
	Total	**60**
Grand Total		**120**

B. Course Objectives and Learning Outcomes

1. Course Description: Research project

2. Course Main Objective:

This course aims at giving students knowledge in the fields:
- Conducting Literature Survey for Graduation Research Project.
- Conducting Laboratory and/or Field Work for Graduation Research Project.
- Expressing Experimental and/or Field Data for Graduation Research Project.
- Writing Scientific Papers.
- Presenting Thesis for Graduation Research Project and Viva.

3. Course Learning Outcomes

	7	Aligned-PLOs
1	**Knowledge:**	
1.1	Demonstrate structures, features, and processes related to Graduation Project	K1
1.2	Identify items and their related functions on diagrams and photos	K2
1.3	State hypotheses and theories related to Graduation Project	K3

7		Aligned-PLOs
2	**Skills :**	
2.1	Explain aspects, theories, and processes relevant to Graduation Project	S1
2.2	Compare different structures and features related to Graduation Project	S2
2.3	Interpret experimental data and apply in relevant situations	S3
2.4	Appraise biological scientific theories.	S4
3	**Competence:**	
3.2	Illustrate ability to work in groups and responsibility	C1
3.2	Demonstrate risk assessment and safety in lab work and field trips	C2

C. Course Contents

No	List of Topics	Contact Hours
1	Choosing Graduation Research Project.	-
2	Literature Survey.	**3**
3	Materials and Methods Survey	**3**
4	Laboratory and/or Field Work.	**15**
5	Data Acquisition and Expression.	**2**
6	Writing Scientific Papers.	**2**
7	Writing Results and Discussion and Thesis Preparation.	**2**
8	Departmental Viva.	**1**
Total		**28**

D. Teaching and Assessment

1. Alignment of CLO's with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge**		
1.1	Recall information of Project	Lectures	Quizzes, MCQs
1.2	Define structures, features, and processes related to Project	Lectures	Quizzes, MCQs, Short Answer Question
2.0	**Skills**		
2.1	Analyze and evaluate aspects relevant to Graduation Project	Lectures, Discussion, Lab, Field Trips	Short Answer Question Quizzes, MCQs
2.2	Compare structures and features related to Project	Lectures, Discussion, Lab, Field Trips	Essay
2.3	Evaluate and justify experimental result to be applied in real situation	Lectures, Group Discussion, Lab work	Essay
2.4	Analyze, evaluate, interpret data from field trips	Lectures, Lab work, Field Trips	Essay
2.5	Design and execute experiments	Lectures, Lab work	Essay
3.0	**Competence**		
3.1	Appraise scientific theories	Lectures, Group Works	Lab work assessment
3.2	Plan and carry out field trips	Group IT Assignment	Assessment

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Written Assignment	4	5
2	Written Test	7	10
3	Written Assignments	8, 10	10
4	Lab Wok/Field Trips	12	5
5	Final Practical Exam	13	20
6	Final Department Viva	14	50

E. Student Academic Counseling and Support

Arrangements for availability of faculty for student consultations and academic advice: 10 Office hours/faculty/week

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	To be determined by Supervisor in relation to Project subject mater
Essential References Materials	* Hofmann A. (2013) Scientific Writing and Communication. Oxford University Press. * Hofmann A. (2016) Writing in the biological sciences. Oxford University Press, Oxford.
Electronic Materials	
Other Learning Materials	-

2. Facilities Required

Item	Resources
Accommodation	1 Lecture room 1 Research Laboratory related to Project subject matter
Technology Resources	AV, Data Show, Smart Board, Laptop, Internet link
Other Resources	Research equipment, glassware, chemicals, consumables

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching	Students, Faculty	Direct (Questionnaire)
Effectiveness of assessment	Peer Reviewer	Direct (Cross Check marking)
Extent of achievement of course learning outcomes	Program Leader	Indirect (QA Committee)
Quality of learning resources	QA Committee	Indirect (Benchmarking)

H. Specification Approval Data

Council / Committee	**Board of Biology Program**
Head of Department	Dr. Y.S. Masrahi
Reference No.	**6TH MEETING OF THE BOARD OF BIOLOGY DEPARTMENT 1440-1441**
Date	**Updated/Revised Nov18, 2019**