اعتماد
NCAAA

T15

Course Specifications
(Postgraduate Degree)

Course Title:	Research Project II
Course Code:	BIOD 598
Program:	M. Sc. Biodiversity
Department:	Biology
College:	Science
Institution:	University of Tabuk

Table of Contents

A. Course Identification

1. Credit hours:	3 credit hours

2. Course type

☒ Required ☐ Elective

3. Level/year at which this course is offered: Level 4/ Second year

4. Pre-requisites for this course (if any)**: BIOD 525**

5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom		
2	Blended		
3	E-learning		
4	Distance learning		
5	Research Project and Dissertation	6	100

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
1	Lecture	
2	Laboratory/Studio	
3	Seminars	
4	Research Project and Dissertation	78
Total		78

B. Course Objectives and Learning Outcomes

1. **Course Description:**
   - The student will learn how to design research, collecting literature and data, interpretation of research findings, writing research, preparation of the dissertation, and presentation research on different topics of biodiversity. They will be skilled in sample sand data collection and field training based on the modern techniques of biodiversity assessment and conservation.

2. Course Main Objective

By the end of this course, the students should be able to:
   - Understand research designing.
   - Identify and describe the methods and techniques of scientific research.
   - Develop writing skills in preparing scientific reports and dissertations.
   - Distinguish the statistical analysis of research data for its significance.
   - Distinguish references and citations for biodiversity studies.

3. Course Learning Outcomes

	Course Learning Outcomes (CLOs)	Aligned PLOs*
1	**Knowledge and Understanding:**	
1.1	State the research designing.	K1
1.2	Demonstrate the significance of research to conserve biodiversity and the sustainability of life.	K2
1.3	Outline how to choose certain biodiversity problems and try to outline the causes consequences and controls on those problems.	K3
1...		
2	**Skills:**	
2.1	Apply methods for the biodiversity assessment and conservation	S2
2.2	Appraise quantitative and qualitative analysis of biodiversity in a certain ecosystem.	S3
2.3	Analyze different methods and tools for the conservation of biodiversity.	S3
2...		
3	**Values:**	
3.1	Illustrate the basic rules for writing a scientific report and dissertation on any research project.	V1
3.2	Examine the research ethics and how to create, write, and design your research.	V2
3.3	Employ research groups/organizations to plan and implement research projects on biodiversity assessment and conservation.	V3
3...		

* Program Learning Outcomes

C. Course Content

No	List of Topics	Contact Hours
1	Collecting literature and data	2
2	Designing research	2
3	Laboratory and fieldwork	3
4	Interpretation of research findings	2
5	Writing research	2
6	Preparation of dissertation	1
7	Presentation of research	1
8		
9		
10		
11		
12		
13		
Total		13

NB: The contact hours include only seminar topics and the others for the field and lab work.

D. Teaching and Assessment
1. **Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding:**		
1.1	State the research designing.	- Lectures. - Group discussions. - Brainstorming. - The use of educational techniques (Videos). - Student's seminars. - Individual presentation. - Lab. demonstrations. - Field activities.	- Oral discussions. - Long and short essays. - Exams (Mid and Final) - Homework. - Quizzes. - Demonstrations. - Lab. reports. - Field reports.
1.2	Demonstrate the significance of research to conserve biodiversity and the sustainability of life.		
1.3	Outline how to choose certain biodiversity problems and try to outline the causes consequences and controls on those problems.		
1…			
2	**Skills:**		
2.1	Apply methods for the biodiversity assessment and conservation	- Lectures. - Group discussions. - Brainstorming. - Simulation. - Research paper-based learning. - The use of interactive video. - Lab. demonstrations. - Individual presentation. - Field activities.	- Peer assessment. - Self-evaluation. - Oral discussion. - Exams (Mid and Final) - Quizzes. - Individual and group presentations. - Lab. reports. - Field reports.
2.2	Appraise quantitative and qualitative analysis of biodiversity in a certain ecosystem.		
2.3	Analyze different methods and tools for the conservation of biodiversity.		
2…			
3.0	**Values:**		
3.1	Illustrate the basic rules for writing a scientific report and dissertation on any research project.	- Research activities. - Oral presentations. - An internet search, assignments, and essays. - Group discussion. - Case studies. - Individual, and group presentations.	- Student's essays and assignments. - Group reports. - Group presentations. - Discussion in lectures. - Student's written participation. - Analytical reports. - Lab. reports. - Case studies. - Posters. - Dissertation.
3.2	Examine the research ethics and how to create, write, and design your research.		
3.3	Employ research groups/organizations to plan and implement research projects on biodiversity assessment and conservation.		
3…			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Collecting literature and data	1, 2	12.5
2	Designing research	3, 4	12.5
3	Laboratory and fieldwork	5, 6, 7,8	25
4	Interpretation of research findings	9, 10	12.5
5	Writing research	11, 12, 13	18.75
6	Preparation of dissertation	14, 15	12.5
7	Presentation of research	16	6.25
8			

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:
- Eight office hours per week per faculty member.
- Academic advising sessions 1hr/ week per faculty member.

F. Learning Resources and Facilities
1. Learning Resources

Required Textbooks	- Bailey, S. (2003) Academic writing a handbook of international student's 3rd edition. ISBN 0-203-83165-9 Master e-book ISBN - Jaan, M. (2000), Textbook Research and Writing, Frankfurt am Main: Peter Lang. - Other references should be selected according to the topics under research.
Essential Reference Materials	- *Journal of Biodiversity*.
Electronic Materials	- Saudi Digital Library. - UNESDOC Digital Library. - www.sciencedirect.com
Other Learning Materials	- Multimedia that is associated with the textbook and the relevant websites.

2. Educational and Research Facilities and Equipment Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	- A sufficient number of classrooms, well equipped practical laboratories are available to accommodate 30-40 students.
Technology Resources (AV, data show, Smart Board, software, etc.)	- Data show projectors and wireless internet connection available for students and faculties.

Item	Resources
	- Data show projectors and wireless internet connection available for students and faculties. - Smart blackboard. - Computer Portable PowerPoint presentations.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	- Lecture slides. - Reference Book. - A Note Book for writing notes. - Well-equipped biology laboratory.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
- Effectiveness of teaching and assessment.	- Students.	• Indirect - Questionnaires.

- Quality of learning resources.	- Program committee.
	- Staff members.
	- Students.
		• Direct
		  - Questionnaires.
		  - Reports.
		  - Meetings.

- The extent of achieving the course learning outcomes.	- Program leaders.
	- Peer Reviewer.
		• Direct & Indirect
		  - Questionnaires.
		  - Reports.
		  - Meetings.

Evaluation Areas/Issues (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Biology Department Members who constructed the program
Reference No.	Committee members – The academic year 1441/1442
Date	