هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

2023
TP-153

Course Specification
(Bachelor)

Course Title:	*Biodiversity*
Course Code:	*BIO1208*
Program:	*Bachelor of Science in Biology*
Department:	*Department of Biology*
College:	*Faculty of Science*
Institution:	*University of Tabuk*
Version:	***Course Specification Version Number***
Last Revision Date:	*September 2023*

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours:					
2 Credit (2 Hours - Theory).					
2. Course type					
A.	☐University	☒ College	☐Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (4th Level / 2nd year)					
4. Course general Description:					
This course introduces biodiversity, its importance in human life, the study of diversity at species, genetic and ecosystem levels, threats to diversity, species extinction, red data list, ex-situ, and in-situ conservation, protected areas, conventions, organizations and biodiversity legislation.					
5. Pre-requirements for this course (if any)**:**					
None					
6. Co-requirements for this course (if any)**:**					
None					
7. Course Main Objective(s):					
By the end of this course, the students should be able to: - Provide a critical and conceptual understanding of biodiversity. - Explore the levels and complexity of biodiversity. - Learn about the threats to biodiversity, species extinction, threatened species, and red - data list. - Know the major conventions, organizations, and legislations of biodiversity.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	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 program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Describe biodiversity, its historical background, and threats.	K1	-Lectures. -Class discussion. -Group discussion. -Case studies.	-Quizzes -periodic examination. -Final examination. -Class discussion and participation. - Homework (Problem-solving).
1.2	Recognize the levels of biodiversity and important approaches in biodiversity conservation.	K2	-Lectures. -Class discussion. -Group discussion. -Homework assignments. -Case studies.	-Quizzes -periodic examination. -Final examination. -Class discussion and participation.

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
				-Homework assignments.
2.0	**Skills**			
2.1	Evaluate the biological process of conservation of biodiversity.	S5	-Lectures. -Short essay -Class discussion. -Group discussion. -Brainstorming.	-Quizzes -reports -Final examination. -Class discussion and participation. - Homework (Problem-solving).
2.2	Interpret scientific results on biodiversity and conservation.	S3	-Lectures. -Short essay -Class discussion. -Group discussion. -Brainstorming.	-Quizzes -reports -Final examination. -Class discussion and participation. - Homework (Problem-solving).
2.3	Illustrate the legislation to protect biodiversity.	S1	-Lectures. -Short essay -Class discussion. -Group discussion. -Brainstorming.	-Quizzes -reports -Final examination. -Class discussion and participation. - Homework (Problem-solving).

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.0	**Values, autonomy, and responsibility**			
3.1	Perform preliminary research and projects to understand biodiversity and its significance in human life and the environment.	V2	-Group discussion. - Short essays. - Homework assignments. - Case studies.	- Class Participation - Homework (Problem-solving)

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Biodiversity	2
2.	Historical Background	2
3.	Importance of Biodiversity in Human Life.	2
4.	Levels of Biodiversity (Species diversity)	2
5	Levels of Biodiversity (Genetic diversity)	2
6.	Levels of Biodiversity (Ecosystem diversity)	2
7.	Threats to Biodiversity.	2
8.	Species Extinction, Causes of Species Extinction, Threatened Species, Red Data List	2
9.	Measurements of Biodiversity.	2
10.	Ex-situ conservation (Gene Bank, Seed Bank, Cryopreservation, Botanical Gardens, Zoological Gardens)	2
11.	In-situ conservation (Protected Areas, Biosphere Reserves)	2
12.	Protected Areas in Saudi Arabia.	2
13.	Major Conventions on Biodiversity.	2
14.	CITES, IUCN, RAMSAR, Biodiversity Legislations	2
15.	Biodiversity and Biotechnology	2
Total		**30**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quizzes	During whole teaching period	10
2.	Homework (Problem-solving)	3 to 13	5
3.	Class Participation	During whole teaching period	5
4.	1st Periodic exam	6	20
5.	2nd Periodic exam	10	20
6.	Final Theoretical Exam	17	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	- Kratochwil, A. (2013). Biodiversity in ecosystems: principles and case studies of different complexity levels. Springer Science & Business Media. ISBN 9789401146777 - Gaston, K J. and Spicer, J. I. (1998), Biodiversity: An Introduction. Blackwell Science, London, UK. - Hawksworth, D. (2010). Management and the Conservation of Biodiversity. Springer. ISBN 978-90-481-3844-9. - Wheater, P C. (2005). Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring. pp. 588. Cambridge University Press. ISBN-13: 978-0521823685. - IBP (2016) Saudi Arabia Ecology, Nature Protection Laws and Regulation Handbook Vol. 1 Strategic Information and Laws. pp. 284. Lulu.com. ISBN: 9781433074844.
Supportive References	- Journal of Biodiversity - Journal of Conservation Biology
Electronic Materials	- Saudi Digital Library.
Other Learning Materials	- UNESDOC Digital Library.

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	- Well-equipped classrooms that accommodate a sufficient number of students
Technology equipment (projector, smart board, software)	- Data show. - Wireless connection in the building for students and faculties.
Other equipment (depending on the nature of the specialty)	- Lecture slides. - Reference Book

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	- Students. - Faculty members.	Indirect & direct: - Questionnaires. - Meetings.
Effectiveness of Students assessment	- Quality and development committee. - Department chair.	- Course report. - Program annual report.
Quality of learning resources	- Plan and program committee. - Students. - Staff members.	Indirect & direct: - Questionnaires. - Meetings. - Reports.
The extent to which CLOs have been achieved	- Quality and development committee. - Peer Reviewer. - Program leaders.	Indirect & direct: - Questionnaires. - Meetings. - Reports.
Other		

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

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**PROGRAMS AND STUDY PLANS COMMITTEE**
REFERENCE NO.	
DATE	**SEPTEMBER 2023**