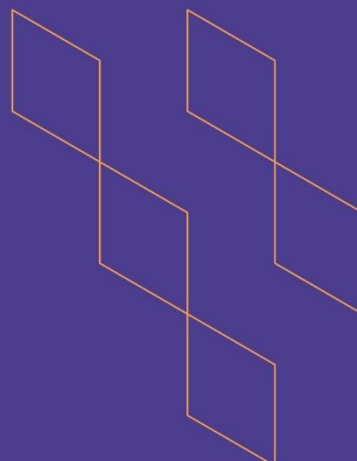




T-104  
2022

## Course Specification



Course Title:	Biodiversity in the Kingdom of Saudi Arabia
Course Code:	<b>BIOL 402</b>
Program:	<b>Biology</b>
Department:	<b>Biology</b>
College:	<b>Science</b>
Institution:	<b>Jazan University</b>
Version:	<b>4</b>
Last Revision Date:	18 October 2020



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## A. General information about the course:

Course Identification	
1. Credit hours:	2
2. Course type	
a. University <input checked="" type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Track <input type="checkbox"/> Others <input type="checkbox"/>	
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>	
3. Level/year at which this course is offered:	Level 11 / 4 <sup>th</sup> Year
4. Course general Description	
<ul style="list-style-type: none"> <li>- The biodiversity course deals with the description Study of the diversity of living organisms on the planet, which is the number of species and individuals that live in a specific ecological area.</li> <li>- The biodiversity course deals with the description Study of the natural vegetation of different habitats of Saudi Arabia</li> <li>- The biodiversity course deals with the description Study of the fauna habitats of Saudi Arabia</li> </ul>	
5. Pre-requirements for this course (if any): Fundamentals of Ecology (BIOL 301)	
Level 7 / 3 <sup>th</sup> Year	
6. Co- requirements for this course (if any): Non	

### 1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	10	76.92
2.	E-learning	1	7.69
3.	Hybrid <ul style="list-style-type: none"> <li>• Traditional classroom</li> <li>• E-learning</li> </ul>	1	7.69
4.	Distance learning	1	7.69

### 2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	11
2.	Laboratory/Studio	22
3.	Field	0
4.	Tutorial	0
5.	Others (specify)	0
	Total	33

## 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	Define all principals, concept, theories and aspects concerning Biodiversity..	K1-1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False. Quizzes. Midterm. Final.
1.2	Explain all processes, mechanisms, definitions, theories, mode of actions of all biological aspects .	K2-1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False. Quizzes. Midterm. Final.
1.3	Apply your knowledge of biological science to solve some applied techniques and problems.	K3-2	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False. Quizzes. Midterm. Final.
2.0	Skills			
2.1	Debate the biological theories, principals and processes in Biodiversity.	S1-1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False. Quizzes. Midterm. Final.
2.2	Predict the results of some biological problems and experiments..	S2-1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False. Quizzes. Midterm. Final.
3.0	Values, autonomy, and responsibility			
3.1	Works collaborative and constructive and lead diverse teams to perform a wide range of tasks with	V3-1	Individual assignments. Group discussion. Lab-work. Self-learning activities. Micro-Project	Lab work assessment, Short Answer Question, MCQs,



Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	responsibility and play a major role in joint work planning and evaluation.		Presentation (individual and teamwork)	
3.2	Develop competencies in critical thinking, delivering scientific information, reporting and data analysis	V3-2	Individual assignments. Group discussion. Lab-work. Self-learning activities. Micro-Project Presentation (individual and teamwork)	Lab work assessment, Short Answer Question, MCQs,

## C. Course Content

No	List of Topics	Contact Hours
1.	<b>Introduction:</b> Introduction to the biodiversity, the importance of biodiversity, The benefits of biodiversity,	1
2.	<b>Elements of biodiversity</b> (Genetic diversity, Species diversity, Ecosystems diversity)	2
3.	<b>Factors affecting biodiversity:</b> <b>Abiotic factors:</b> as (Temperatures, Humidity, the light, wind, Space. Time and Pollution) <b>Biotic factors:</b> as ( Predation,-migration, -Extinction,- Competition)	1
4.	<b>Examples of some important habitat in the Kingdom:</b> Coral Reef, Coral forms (Fringing Reef, Barrier Reef, Atolls, Patch Reef) Coral bleaching phenomenon, Human effect on coral.	1
5.	<b>International and local efforts to protect biodiversity:</b> Red List of Threatened Species ((IUCN),terminology of the Red List of Threatened Species., Conservation of biodiversity, Natural Reserves, Wildlife Reserves, Marine reserves.	2
6.	<b>The Fauna in Saudi Arabia : represented by :</b> -Chondrichthyes (Cartilaginous Fishes) (General characters, ecology, distribution. examples) -Osteichthyes (Teleostomi (or Bony Fishes ))(General characters, ecology, distribution. examples) -Amphibians (General characters, ecology, distribution. examples) -Reptiles (General characters, ecology, distribution. examples) -Aves (General characters, ecology, distribution. examples)	1



	-Mammals (General characters, ecology, distribution. examples)	
7.	<b>The Flora in Saudi Arabia</b> - Geographical regions of Saudi Arabia and protected areas in KSA -Vegetation and plant communities in Jazan	1
8.	-Communities of coastal line and sabakhas - Communities of Tehama coastal plain	1
9.	- Communities of Tehama hill slopes & mountains - Wades and Cultivated flora of Jazan	1
Total		11

## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Theoretical quiz	4	5
2.	Mid-term exam	6	10
3.	Practical quiz	5	5
4.	Practical assignment	6	5
5.	Final practical exam	11	20
6.	Final Exam	12	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	<ul style="list-style-type: none"> <li>- مسرحي، يحيى سليمان (2011) الدليل المصور للنباتات البرية في منطقة جازان</li> <li>- حجي، عدنان محمد (1996) . مقدمة لفونة المملكة العربية السعودية.</li> </ul>
Supportive References	<ul style="list-style-type: none"> <li>• Collette S. (2000) Wild Flora of Saudi Arabia. Saudi Arabian National Authority for Wildlife Protection, Riyadh.</li> <li>• Wilhelm Büttiker, Friedhelm Krupp, Iyad Nader, Wolfgang Schneider. Fauna of Arabia. Vol. (1- 25). Basel.</li> </ul>
Electronic Materials	<a href="http://www.saudiwildlife.com/site/home/index">http://www.saudiwildlife.com/site/home/index</a> <a href="https://www.iucnredlist.org/">https://www.iucnredlist.org/</a>
Other Learning Materials	PowerPoint presentations given by the instructors practical and theoretical

### 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)	Internet connection, data show or smart board
Other equipment (depending on the nature of the specialty)	Light microscopes, glassware, chemicals, consumables, dissection tools.

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Peer to peer Reviewer, students	Indirect (Surveys)
Effectiveness of students assessment	Program quality committee, Program leader, peer reviewer	Direct (Cross Check), Indirect (Surveys)
Quality of learning resources	Students	Indirect (Surveys)
The extent to which CLOs have been achieved	Course coordinator	Excel sheet of CLOs assessment (direct), Surveys (indirect)
Other		

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

**Assessment Methods** (Direct, Indirect)



## G. Specification Approval Data

COUNCIL /COMMITTEE	BIOLOGY PROGRAM BOARD
REFERENCE NO.	BIO2214
DATE	20/9/2022AD

Course coordinator: **Prof Dr. yahya Soliman Masrahi**

Signature:

**Head of Department**

Name: **Dr. ABDULLAH YAHYA MASHRAQI**

Signature:

