



# Course Specification

## (Bachelor)

**Course Title:** Animal Ecology & Behavior

**Course Code:** Biol 345

**Program:** Biology

**Department:** Biology Department

**College:** College of Science

**Institution:** Majmaah University

**Version:** Third Version

**Last Revision Date:** 24/12/2023



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## A. General information about the course:

### 1. Course Identification

**1. Credit hours: 3 (2+1)**

**Equivalent to ECTS Credit Point: 4.5**

#### 2. Course type

A.  University  College  Department  Track  Others

B.  Required  Elective

**3. Level/year at which this course is offered: (6<sup>th</sup> level / 3<sup>rd</sup> year)**

#### 4. Course General Description:

The course is designed to study animals and how they relate to each other, their environment, and the activities animals perform during their lifetime, including locomotion, feeding, breeding, prey capture, avoidance of predators, and social behavior. Animals send signals, respond to signals or stimuli, maintain behavior, make choices, and interact with one another.

#### 5. Pre-requirements for this course (if any):

BIOL-241

#### 6. Co-requirements for this course (if any):

N/A

#### 7. Course Main Objective(s):

- Define what animal ecology means.
- Know the importance of studying the subject matter of animal ecology.
- Natural and vital factors affecting the behavior of animals.

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

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	80%
2	E-learning	15	20%
3	Hybrid <ul style="list-style-type: none"> <li>• Traditional classroom</li> <li>• E-learning</li> </ul>	--	--
4	Distance learning	--	--





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

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	30
3.	Field	--
4.	Tutorial	--
5.	Others (specify)	--
<b>Total Contact hours</b>		<b>60</b>

### Workload (based on the academic semester)

No	Activity	Workload (in hours)
1.	Contact Hours	60
2.	Self-study hours or Academic learning hours (Assignment, Quizzes, Reports, Discussions, Library, Research, ...)	60
<b>Total Workload</b>		<b>120 hours</b>
<b>Equivalent to ECTS Credit points</b>		<b>4.5</b>

## B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment

### Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and understanding</b>			
1.2	Outline the different ecological behaviors of the animals showing the adaptation to the environment.	K2	<ul style="list-style-type: none"> <li>Lecture Notes</li> <li>PowerPoint Presentation</li> <li>Individual and group discussion.</li> </ul>	<ul style="list-style-type: none"> <li>Assignments</li> <li>Quizzes</li> <li>Midterm and final exams</li> </ul>
...				
<b>2.0</b>	<b>Skills</b>			
2.1	Apply biological concepts using integration of the various adaptive and physiological features of animals to distinguish the different types of animal behavior.	S1	<ul style="list-style-type: none"> <li>Lecture Notes</li> <li>PowerPoint Presentation</li> <li>Individual and group discussion.</li> </ul>	<ul style="list-style-type: none"> <li>Assignments</li> <li>Quizzes</li> <li>Midterm and final exams</li> </ul>
2.2				
...				



Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.0	Values, autonomy, and responsibility			
3.1	Communicate and work effectively in groups as well as individually to differentiating the various concepts of animal behaviors.	V1	Students will practice as groups (team work)	Assessment of team assignment presentation and reports.
3.2				
...				

### C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Animal ecology and behavior.	4
2.	Approaches to Animal Behavior	4
3.	Proximate and Ultimate Causes	4
4.	Development of Behavior	4
5.	Animal maturation	4
6.	Instinct/Learning Interactions	4
7.	Animals respond to their environment	4
8.	Social Behavior: Mating	4
9.	Classical Conditioning and Instrumental Conditioning	4
10.	Control of Behavior (Nervous system & Endocrine system).	4
11.	Animal Communication	4
12.	Behavioral Ecology (Habitat selection Foraging Behavior)	4
13.	Social behavior	4
14.	Homing & Navigation	4
15.	Biological Clocks	4
Total		60





## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Group project & essays	Week 1-10	5 %
2.	Mid-term Exam 1	Week 5	15 %
3.	Bb electronic exam	Week 9	15 %
4.	Mid-term Exam 2	Week 8-10	15 %
5.	Oral presentation	Week 12	10 %
6.	Final Exam	Week 16	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

<b>Essential References</b>	<ul style="list-style-type: none"> <li>Nicholas B. Davies. 2022. An Introduction to Behavioural Ecology. Wiley-Blackwell.</li> <li>Shawn Nordell 2023. Animal Behavior: Concepts, Methods, and Applications. Oxford University Press.</li> </ul>
<b>Supportive References</b>	Michael D. Breed. 2015. Animal Behavior. Academic Press
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>Saudi Digital Library <a href="https://www.sdl.edu.sa/SDLPortal/Publishers.aspx">https://www.sdl.edu.sa/SDLPortal/Publishers.aspx</a></li> <li><a href="http://www.animalbehavior.com">http://www.animalbehavior.com</a></li> </ul>
<b>Other Learning Materials</b>	Videos, slides and presentations that are available with the instructor.

### 2. Required Facilities and equipment

Items	Resources
<b>facilities</b> (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	<ul style="list-style-type: none"> <li>The number of seats in classrooms and lab. is suitable and no need for extra seats.</li> <li>The classrooms provided with smart board and e-podium and laboratories provided with smart board.</li> </ul>
<b>Technology equipment</b> (projector, smart board, software)	The classrooms are provided with smart board and e-podium
<b>Other equipment</b> (depending on the nature of the specialty)	Department need a computer room containing at least 30 systems for Bb exams and e-learning.





## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	(Students- internal committee – HOD)	Indirect
Effectiveness of Students assessment	Staff member (Per reviewer)	Indirect
Quality of learning resources	Staff member (course coordinator)	Direct
The extent to which CLOs have been achieved	Staff member (course coordinator - Quality committee - HOD)	Direct
Other		

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

**Assessment Methods** (Direct, Indirect)

## G. Specification Approval

<b>COUNCIL /COMMITTEE</b>	<b>DEPARTMENT COUNCIL</b>
<b>REFERENCE NO.</b>	<b>7</b>
<b>DATE</b>	<b>4/4/1446 (7/10/2024)</b>

