



## Course Specifications

<b>Course Title:</b>	Chordata
<b>Course Code:</b>	254 ZOO
<b>Program:</b>	Biology
<b>Department:</b>	Biology
<b>College:</b>	Science
<b>Institution:</b>	Jazan University

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## A. Course Identification

<b>1. Credit hours:</b> <b>3 Hours</b>	
<b>2. Course type</b>	
a.	University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
<b>3. Level/year at which this course is offered:</b> <b>Four / Two</b>	
<b>4. Pre-requisites for this course (if any):</b> None None	
<b>5. Co-requisites for this course (if any):</b> None None	

### 6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	h 26	86.7%
2	Blended	h 4	13.3%
3	E-learning		
4	Distance learning		
5	Other		

### 7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	30
2	Laboratory/Studio	60
3	Tutorial	-
4	Others (specify)	-
	<b>Total</b>	<b>90</b>

## B. Course Objectives and Learning Outcomes

### 1. Course Description

Course Title	Course No.	Credit Units			Year	Level	Pre-Requisite
		Theoretical	Practical	Total			
CHORDATES	254ZOO	2	1	3	2 <sup>nd</sup>	4 <sup>th</sup>	-

### 2. Course Main Objective

#### 1) Course Objectives:

Chordates and their importance for Human life. Classification of chordates, Protochordates and Euchordates. Morphological and Anatomical characteristics of examples for each Class.

#### 2) Course Contents:

The Chordates including Urochordates and Cephalochordates (Ancestry, Characteristics, Classification and example), The fishes (Ancestry, Classification, Cyclostomata, Jawless fishes, Cartilaginous fishes, Bony fishes and examples). The Amphibians (Origin, Characteristics, Caecilians, Salamanders, Frogs and example). The Reptiles (Origin, Characteristics, Classification, Turtles, Lizards, Snake, Worm Lizards, Crocodiles, Tuatara and example). The Aves (Origin,



Characteristics, Form and Function, Classification and example), The Mammals (Origin, Characteristics, Structural and Functional adaptations, Food and Feeding, Classification and example)

### 3) Practical:

Describe and classification of chordates, Protochordates, and Vertebrates. Studying the Morphological and Anatomical characteristics of all examples for every class

### 4) Assessment:

Exams: Essay/Objective, class work, research work, Quizzes

Practical: Identifying samples and slides, drawings.

Theoretical (midterm – homework and quizzes) 20%

Practical (midterm – homework and quizzes- final exam) 30%

Final Theoretical exam 50%

### 5) Teaching Methods:

Lectures, Presentations, Group and interactive discussion, Lab work, demonstration and web-based learning.

### 6) Text Books:

عبدالرحمن، منى فريد (2014). الفقاريات. المكتبة الأكاديمية

### 7) References:

- Cleveland P. Hickman, Jr., Larry S. Roberts, Allan Larson, Helen I'Anson, David J. Eisenhour (2006) Integrated Principles of Zoology. McGraw-Hill Higher, New York.

## 3. Course Learning Outcomes

CLOs		Aligned PLOs
1	<b>Knowledge and Understanding</b>	
1.1	Define all principals, concepts, theories and aspects concerning with biology	K1.1
1.2	Label all drawings, diagrams, biological microscopic pictures and specimens related to biological science	K1.2
1.3	List all characteristics, importance, features, and steps of biological aspects.	K1.3
1.4	Differentiate (Compare) between different mechanisms, functions, practices and aspects related to biological sciences.	K2.1
1.5	Explain all processes, mechanisms, definitions, theories, mode of actions of all biological aspects	K2.2
1.6	Interpret by using your knowledge and understanding some of biological phenomena.	K3.2
2	<b>Skills :</b>	
2.1	Examine theoretically or practically the slides, photos, diagrams or statements of biological aspects.	S1.3
3	<b>Values:</b>	
3.1	Develop competencies in critical thinking, delivering scientific information, reporting and data analysis	V3.2

## C. Course Content

No	List of Topics	Contact Hours
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1	The Protochordates	6
2	Euchordates	2
3	The Fishes	4
4	The Amphibians	4
5	The Reptiles	4
6	The Aves	4
7	The Mammals	4
8	Final exam	2
<b>Total</b>		<b>30</b>

## D. Teaching and Assessment

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

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and Understanding</b>		
1.1	Define all principals, concepts, theories and aspects concerning with biology	Lectures,	Quizzes, Short Answer Question, MCQs
1.2	Label all drawings, diagrams, biological microscopic pictures and specimens related to biological science	Lectures, Lab work	Quizzes, Short Answer Question, , Lab work
1.3	List all characteristics, importance, features, and steps of biological aspects.	Lectures,	Short Answer Question
2.1	Differentiate (Compare) between different mechanisms, functions, practices and aspects related to biological sciences.	Lectures, Lab work	Answer Question
2.2	Explain all processes, mechanisms, definitions, theories, mode of actions of all biological aspects	Lectures,	Answer Question
3.2	Interpret by using your knowledge and understanding some of biological phenomena.	Lectures, Lab work	Answer Question
<b>2.0</b>	<b>Skills</b>		
1.1	Debate the biological theories, principles and processes.	Lectures, Lab work	Short Answer Question, Lab work
1.2	Examine theoretically or practically the slides, photos, diagrams or statements of biological aspects.	Lectures, Lab work, Group Discussion	Practical Quizzes, Short Answer Question, Lab work assessment
<b>3.0</b>	<b>Values</b>		
3.2	Develop competencies in critical thinking, delivering scientific information, reporting and data analysis	Lectures	Lab work assessment, Theoretical assessment



## 2. Assessment Tasks for Students

#	*Assessment task	Week Due	Percentage of Total Assessment Score
1	Written assignment	3	3
2	Group assignment	4	2
3	Theoretical quiz	5	5
4	Mid-term exam	7	10
5	Practical Mid-term exam	9	10
6	Practical assignment	11	5
7	Final practical exam	13	15
8	Final Exam	15	50

\*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 :**  
10 Office hours/faculty/week.

## F. Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>عبدالرحمن، منى فريد (2014). الفقرات. المكتبة الأكاديمية</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>محمد، محمد اسماعيل، نيشرقاوي، حلميشاي، تغريد عبدالرحمن، يحيى العاصي (2010). أساسيات علم الحيوان. دار الفكر العربي.</li> <li>Hickman, C.P, Roberts, L.S and Larson, A. (2011) Integrated Principles of Zoology. Eleventh edition, McGraw Hill, London, New York.</li> </ul>
<b>Electronic Materials</b>	<a href="https://ucmp.berkeley.edu/chordata/chordata.html">https://ucmp.berkeley.edu/chordata/chordata.html</a> <a href="http://tolweb.org/Chordata/2499">http://tolweb.org/Chordata/2499</a>
<b>Other Learning Materials</b>	

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> Classrooms, laboratories, demonstration) (rooms/labs, etc)	1 Lecture room(s) for groups of 50 students. 1 Laboratory for group of 25 students.
<b>Technology Resources</b> ( AV, data show, Smart Board, software, etc)	AV, data show, Smart Board
<b>Other Resources</b> Specify, e.g. if specific laboratory) equipment is required, list requirements or (attach a list	Light microscopes, glassware, chemicals, consumables, dissection tools.



## 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)

**Evaluation areas** (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	
Reference No.	
Date	

Course coordinator: Dr. Mohamed Mahmoud Abdelwahab shahat

Signature:

*Mohamed Abdelwahab*

Date 15 /2/ 2021

Approved by:

Name: Dr. Yahia Soleiman Masrahi      Position: Chair of Department

Signature:

