هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**CHORDATES**
Course Code:	**ZOOL254**
Program:	**BIOLOGY**
Department:	**BIOLOGY**
College:	**SCIENCE**
Institution:	**JAZAN UNIVERSITY**
Version:	**4**
Last Revision Date:	**18 October 2021**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3 CH				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: 5th Level/ 2nd Year					
4. Course general Description ➢ The course deals with the basic characters of chordates, origin, and Ancestry of chordates. ➢ This course describes the general characters and classification of chordates up to order level. ➢ This course also describes the different types of modifications that occur in the skeletal body or in various other parts of the body to adapt the animal to the environment in which it lives ➢ The study samples were taken for each type as a model for the study					
5. Pre-requirements for this course (if any): BIOL101					
6. Co- requirements for this course (if any): Non					
7. Course Main Objective(s) **This course is designed to provide students with the following concepts:** 1. To classify Phylum Chordata and its different Subclasses. 2. To reorganize of the anatomy of the body plan in vertebrates, at the level of organs and systems. 3. To identify of the morphological and anatomical structure for the major groups of vertebrates from an evolutionary point of view. 4. By the end of the course, the student should: • Have a good knowledge and understanding of the importance of recognizing the taxonomic status of the living organism to distinguish it. • Compare between the specific features and system and mechanisms of all classes of chordates.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	44	100%
2.	E-learning	0	0
3.	Hybrid • Traditional classroom	0	0

No	Mode of Instruction	Contact Hours	Percentage
	• E-learning		
4.	Distance learning	0	0

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	22
2.	Laboratory/Studio	22
3.	Field	0
4.	Tutorial	0
5.	Others (specify)	0
	Total	44

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, concepts, theories and aspects concerning with biology	K1.1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False.
1.2	Label all drawings, diagrams, biological microscopic pictures and specimens related to biological science	K1.2	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False.
1.3	Differentiate (Compare) between different mechanisms, functions, practices and aspects related to biological sciences.	K2.1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False.
1.4	Explain all processes, mechanisms, definitions, theories, mode of actions of all biological aspects	K2.2	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False.
1.5	Interpret by using your knowledge and understanding some of biological phenomena.	K3.2	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False.
2.0	Skills			
2.1	Debate the biological theories, principles and processes	S1.1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False. Quizzes. Midterm. Final.
2.2	Examine theoretically or practically the slides, photos, diagrams or statements of biological aspects.	S1.2	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False. Quizzes. Midterm. Final.

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.0	Values, autonomy, and responsibility			
3.1	Develop competencies in critical thinking, delivering scientific information, reporting and data analysis	V3.1	Individual assignments. Group discussion. Lab-work. Self-learning activities. Micro-Project Presentation (individual and teamwork)	Group Assignment. Observation. Group Discussion. Oral exam. Laboratory work.

C. Course Content

No	List of Topics	Contact Hours
1.	**Introduction of phylum Chordata:** characteristics that distinguish chordates from other animals, characteristics that chordates share with other animals, general characters, classification. Hemichordae, general characters, the morphology of Balanoglossus. General characters of Urochordata. Digestive, circulatory genital, and nervous systems of Ascidia. General characters of Cephalochordate. Amphioxus. Digestive, circulatory, excretory, genital, and nervous systems of Amphioxus.	4
2.	**Subphylum Craniata:** Agnatha. Class Cyclostomata. General characters, classification. Digestive, respiratory, circulatory genital, and nervous systems of Petromyzon	3
3.	**Infraphylum Gnathostomata**: **General characters of fishes, classification of** Pisces. Class Chondrichthyes. External morphology, digestive, circulatory, excretory, genital, skeletal, and nervous systems of dogfish	2
4.	**Class Osteichthyes:** General characters of fishes, classification of bony fishes, external feature, digestive, circulatory, excretory, genital, skeletal, and nervous systems of Tilapia.	2
5.	**Tetrapoda: Class Amphibians:** characters, classification. Dissection of the toad, skin and coloration, digestive, circulatory, excretory, genital, respiratory, and nervous systems of the toad.	4
6.	**Class Reptilia:** General characteristics, classification of reptilian orders, General characteristics, digestive, circulatory, respiratory, urinogenital, and nervous systems of Scincus	2
7.	**Class Aves:** General characteristics, Adaptation of birds for living in the air, classification. Skeletal, digestive, circulatory, respiratory, excretory, genital, and nervous systems of pigeon.	3

8.	**Class Mammalia:** general characteristics, classification, external form, skeletal, digestive, circulatory, excretory, genital, and nervous systems of rabbit	2 **(Self-Learning)**
Total		22

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	عبدالرحمن ،منى فريد (2014). الفقاريات. المكتبة الأكاديمية
Supportive References	محمد، محمد اسماعيل، نيشرقاوي علي،حلمي بشاي،تغريدعبدالرحمن،يحيي العاصي (2010). أساسيات علم الحيوان. دار الفكر العربي. Hickman, C.P, Roberts, L.S and Larson, A. (2011) Integrated Principles of Zoology. Eleventh edition, McGraw Hill. London, New York.
Electronic Materials	https://ucmp.berkeley.edu/chordata/chordata.html , http://tolweb.org/Chordata/2499
Other Learning Materials	

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, microscopic slides for the course examples, all samples animals for dissection

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: **Dr. ABDELALIM GADALLAH**

Signature:

Head of Department

Name: **Dr. ABDULLAH YAHYA MASHRAQI**

Signature: