### **Course Outline of Zoology**

### 1. Instructor's Information

Instructor's / Coordinator's Name:	Ahmed Abu-zaiton
Office Hours:	11-12 AM
Office and Phone:	3661
Email:	abuzaiton@aabu.edu.jo
Research and Teaching Assistant /	
Supervisor / Technical (if any):	

### 2. Course Description

Major invertebrate phyla, their classification, habitat, morphology and study of various organs with emphasis on the evolutionary changes within and between phyla and ecological adaptation also, the course includes basic information on chordates, their origin & phylogenetic relationship with different vertebrate groups. Comparative study of various organ systems and their modifications which occurred as a result of adaptation from the evolutionary point of view

#### 3. Course Information

Course No.: 404213	Course Title: zoology	Level: 2
Course Type: Theoretical	Prerequisite / 404102	Class Time: 9-10
Academic Year:2019 / 2020	Semester: first	Study hours: 3

### 4. Course Objectives:

a-	To understand the classification of animals phylums			
b-	To explain the main characteristics of each phylum			
c-	To know Comparative study of various organ systems and their modifications			
d-				

## **5. Learning Outcomes**

### (Knowledge, Skills, and Competencies)

Upon successful completion of the course, the students will be able to:

- 1. Classify the animals group
- 2. Evaluate the basic information of chordates

3. Debate the function of different organs in Aves
4
5
6

# **6. Course Content**

Week	Subject	
First	Introduction to Animal kingdom	
Second	protozoan group	
Third	Porifera and Cnidaria	
Fourth	Platyhelminthes	
Fifth	Nematoda	
Sixth	Mollusca and Annelida	
	First Exam	
Eighth	Arthropoda	
Ninth	Echinodermata and Chordate	
Tenth	Vertebrates - fishes	
Eleventh	Vertebrates - Amphibians	
	Second Exam	
Thirteenth	Vertebrates – Reptiles	
Fourteenth	Vertebrates - Birds	
Fifteenth	Comparative anatomical and biological studies of	
	vertebrates 1.	
Sixteenth	Final Exam	

# 7. Teaching and Learning Strategies and Evaluation Methods

No.	<b>Learning Outcomes</b>	Teaching	Learning	<b>Evaluation / Measurement Method</b>	
		Strategies	Activities	(Exam/ presentations/ discussion/	
				assignments)	
1					
2					
3					
4					
5					
6					

### 8. Assessment

Methods Used	<b>Assessment Time</b>	Distribution of grades
--------------	------------------------	------------------------

1- semester work (report,	During semester	
assignments, attendance)		
2- First Exam	Seventh week	
3- Second Exam	Twelfth week	
4- Final Exam	Week of the final exams	

### 9. Textbook

Main Reference	Integrated Principles of Zoology	
Author	Hickman, C.P. et al	
Publisher	McGraw-Hill.	
Year	2010	
Edition	12 edition	
Textbook Website		

# 10. Extra References (books and research published in periodicals or websites)

1-	
2-	
3-	

# **Academic Program Descriptions**

1.	Program Title	
2.	Program Number	
3.	University Name	
4.	Program Level	
5.	Program Scientific Degree	
6.	Faculty	
7.	Department	
8.	Other Departments engaged in teaching the	
	program	
9.	Attendance Method	
10.	Program Period	
11.	Credit Hours/ Actual Hours	
12.	Language of Teaching	
13.	Number and date of the program license by the	
	Ministry of Higher Education	
14.	Number and date of the program national	
	accreditation	
	Program Capacity/ Year	
	The Program is accredited by other authorities	
15.	Date of program initiation / date of the program	
	last review	
16.	Current number of students	
17.	Program Coordinator (Name, Phone, Email)	

# 18. About the Program and its Themes

 • • • • • •

# 19. Program Vision and Mission

Vision	
	• •

Mission
20. Reasons of the Initiation of the Program
21. Program Objectives
1
1
1
1
1
1
1
1
1.         2.         3.         4.         5.         6.
1
1
1
1

# 23. Conditions of Admission to the Program


#### 24. Teaching Strategies and Methods

Targeted learning outcomes are developed through the following teaching strategies and activities:

blended learning, Flip learning, cooperative learning, discussion and dialogue, practical approach to knowledge acquisition through application, inquiry, critical thinking and problem solving, creative thinking, lecture, debate, ...etc.

#### 25. Evaluation Methods

The achievement of the targeted learning outcomes is proved through the following evaluation methods:

#### Examples

- 1. Continuing evaluation during lectures with real evaluation strategies and tools: performance-based evaluation, observation, communication, self-review, ...
- 2. Writing a research paper in one of the subjects of the course provided that it is not literally translated, but a documented paper showing the features of writer's character.
- 3. Applying some of the official assessment tools and providing a relevant report
- 4. Developing a scale that addresses a developmental aspect
- 5. Providing a summary and critique of some recent studies dealing with the subjects of the course
- 1. 6. Examinations in accordance with instructions

#### 26. Benchmarks

Targeted learning outcomes have been developed to reflect the following benchmarks (vision and mission of the University, standards of local and global accreditation commissions, international universities, relevant legislative and syndicate commissions, academic staff, students, employers, and community representatives)

# 27. Four Outstanding International Universities Offer the Same Specialization and their Plans Have been Benefited from

1	 	
2	 	
		• • • • • • • • • • • • • • • • • • • •

### 28. Program Instructions

Instructions of success and failure, assessment, and the like, which are not
included in the degree award instructions.

### 29. Study Plan

## **1- University Requirements**

# **A.** Compulsory Requirements

Course Number	<b>Course Title</b>	Credi	t Hours	Prerequisite
		Theoretical	Practical	

# **B.** Optional Courses

Course Number	<b>Course Title</b>	Credi	t Hours	Prerequisite
		Theoretical	Practical	

# **2- Faculty Requirements**

# **A.** Compulsory Requirements

Course Number   Cours	se Title Credit Hours	Prerequisite
-----------------------	-----------------------	--------------

		Theoretical	Practical	
D. Ontional Co.				
B. Optional Co	urses			
Course Number	<b>Course Title</b>	Credi	t Hours	Prerequisite
		Theoretical	Practical	
3- Specializatio	n Requireme	nts		
A. Compulsory	Doguinomon	<b>t</b> a		
A. Compuisor y	Kequii eiileii	ıs		
Course Number	<b>Course Title</b>	Credi	t Hours	Prerequisite
		Theoretical	Practical	
B. Optional Co				
B. Optional Co  Course Number	Course Title		t Hours	Prerequisite
		Credi	t Hours Practical	Prerequisite
				Prerequisite
				Prerequisite
				Prerequisite
Course Number	Course Title	Theoretical		Prerequisite
	Course Title	Theoretical		Prerequisite
Course Number  30. Field Train	Course Title	Theoretical  Dle)		Prerequisite
Course Number  30. Field Train	Course Title	Theoretical  Dle)		Prerequisite
Course Number  30. Field Train	Course Title	Theoretical  Dle)		Prerequisite
Course Number  30. Field Train	Course Title	Theoretical  Dle)		Prerequisite
Course Number  30. Field Train	Course Title	Theoretical  Dle)		Prerequisite
Course Number	Course Title	Theoretical  Dle)		Prerequisite
Course Number  30. Field Train	Course Title	Theoretical  Dle)		Prerequisite
Course Number  30. Field Train	Course Title	Theoretical  Dle)		Prerequisite
30. Field Traini Description, tim	ing (if availabing, training c	Theoretical  ole)  redit hours	Practical	Prerequisite
30. Field Training Description, time 31. Graduation	ing (if availabing, training c	Theoretical  ole) redit hours  esearch (if any	Practical	Prerequisite
30. Field Traini Description, tim	ing (if availabing, training c	Theoretical  ole) redit hours  esearch (if any	Practical	Prerequisite
30. Field Training Description, time 31. Graduation	ing (if availabing, training c	Theoretical  ole) redit hours  esearch (if any	Practical	Prerequisite
30. Field Training Description, time 31. Graduation	ing (if availabing, training c	Theoretical  ole) redit hours  esearch (if any	Practical	Prerequisite
30. Field Training Description, time 31. Graduation	ing (if availabing, training c	Theoretical  ole) redit hours  esearch (if any	Practical	Prerequisite

Learning outcomes	Outcome	Outcome	Outcome	Outcome	Outcome	Outco
se No. and Title	(1)	(2)	(3)	(4)	(5)	(6)
33. Development p				ge, compe	etencies ai	nd
				ge, compe	etencies ar	nd
				ge, compe	etencies an	nd
				ge, compe	etencies an	
	rs of study	in the pro	gram			
skills over the year	es of study	in the pro	gram			

	D- A	caden	nic Staff									
Э.	Name	Date of Birth	Nationality	Gene Accu Spec		gr an gr da	niversity of aduation ad aduation ate (last aalification)	Education Qualific		Acaden rank, date, a univers name	nd	Course(s) t be taught
	D a a 1						Academic	Staff	Stud	ents	Во	oth
			and technic		naterials Numbe		eeded to i		ent th		rar	n
							Academic	Staff	Stud	ents	Во	oth
	Books											
	Scientif											
	Electro		oks entific Jouri	2010								
	Data Ba		enunc Journ	liais								
Ľ												
	F- A	uthori	ties that p	rovid	le facilit	ties	s for prac	tical an	d fiel	d train	ing	5
					• • • • • • • • •							
	35. N	<b>Ietho</b>	ds to Ens	ure l	Progran	n (	Quality					
	1 337	hat ar	e the meth	nods	used to	as	sess the t	eaching	g and	learnii	ng '	process,
	1 11/	hat ar	e the meth	ods	used to	as	sess the t	eaching	g and	learnii	ng j	process
			ectiveness			<i>p</i>	lan?					

2. What are the methods used to obtain feedback from students regarding the quality of education, skills and experiences acquired?
3. What are the methods used to develop the skills, knowledge and competencies of the academic staff in the program?
4. What criteria and indicators are used to ensure program quality commitment?
36. Statistics and surveys issued by official authorities showing the numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this
numbers of graduate students and the unemployment rate in this
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization
numbers of graduate students and the unemployment rate in this specialization