

## Course Syllabus

1	<b>Course title</b>	General Zoology	
2	<b>Course number</b>	0334261	
3	<b>Credit hours</b>	4 credit hours (3 hrs theory + 1 hr lab)	
	<b>Contact hours (theory, practical)</b>	Theory: 3 hrs weekly Lab: 3 hrs weekly	
4	<b>Prerequisites/corequisites</b>	General Biology 0304102	
5	<b>Program title</b>	B.Sc. in Biological Sciences	
6	<b>Program code</b>	04	
7	<b>Awarding institution</b>	The University of Jordan	
8	<b>School</b>	Science	
9	<b>Department</b>	Biological Sciences	
10	<b>Course level</b>	Second year	
11	<b>Year of study and semester(s)</b>	2022-2023, second semester	
12	<b>Other department(s) involved in teaching the course</b>	None	
13	<b>Main teaching language</b>	English	
14	<b>Delivery method</b>	<input checked="" type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input type="checkbox"/> Fully online	
15	<b>Online platforms(s)</b>	<input type="checkbox"/> Moodle <input type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....	
16	<b>Issuing/Revision Date</b>	20.02.2023	



### 17 Course Coordinator:

Name: Prof. Hesham M. Al-Younes

Contact hours:

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Email: [alyounes@ju.edu.jo](mailto:alyounes@ju.edu.jo)

### 18 Other instructors:

Name:

Office number:

Phone number:

Email:

Contact hours:

Name:

Office number:

Phone number:

Email:

Contact hours:

### 19 Course Description:

As stated in the approved study plan.

General Zoology is a four-credit hour course that consists of two 75-minute lectures and one three-hour laboratory session per week. The course is considered as an overview of the field of zoology. This course investigates the taxonomy, morphology, anatomy, physiology, ecology and evolution of organisms belonging to the kingdoms Protista and Animalia. The laboratory will provide students with the experience with regard to the diversity of organisms from taxonomic, morphological, structural, functional and ecological perspectives. Students are expected to pass in both the theory and the practical examinations.



## 20 Course aims and outcomes:

### A- Aims:

1. To investigate the unicellular eukaryotic organisms belonging to the Kingdom Protista, which possess animal-like properties.
2. To be aware of levels of organization of animals and criteria used for categorization of organisms belonging to the kingdom Animalia.
3. To systematically analyze phyla of the kingdom Animalia.
4. To have knowledge about morphology, anatomy, physiology and ecology of animals belonging to each phylum with a focus on some prominent examples on each phylum.

### B- Course Learning Outcomes (CLOs):

1. to understand levels of organization of organisms and major morphological criteria (characteristics) used for the classification and identification of aquatic and terrestrial animals encountered on a daily basis.
2. to differentiate among protists and animal life cycles, behaviors, adaptations, and relationships.
3. to identify functions of many parts of protists and invertebrate and vertebrate organisms.
4. to have a substantial interest in the discipline zoology and appreciate the role of other organisms, which share our planet.
5. to understand ecological, economical and medical, if present, significance of animals.
6. to have the ability to scientifically draw animals mounted on microscopic slides and to make short presentations with movies about different zoology topics in front of the students in lab sessions.

CLOs \ SLOs	SLO (1) An ability to identify, formulate, and solve broadly-defined technical or Scientific problems by applying knowledge of mathematics and science and /or technical topics to areas relevant to discipline	SLO (2) An ability to formulate or design a system, process, procedure or program to meet desired needs	SLO (3) An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgement to draw conclusions	SLO (4) An ability to communicate effectively with a range of audiences	SLO (5) An ability to understand ethical and professional responsibilities and the impact of technical and /or scientific solutions in global , economic, environmental, and societal contexts	SLO (6) An ability to function effectively on teams that establish goals plan tasks , meet deadlines and analyze risk and uncertainty
1. to understand levels of organization of organisms and major morphological criteria (characteristics) used for the classification and identification of aquatic and terrestrial animals encountered on a daily basis			X			
2. to differentiate among protists and animal life cycles, behaviors, adaptations, and relationships						
3. to identify functions of many parts of protists and invertebrate and vertebrate organism						
4. to have a substantial interest in the discipline zoology and appreciate the role of other organisms, which share our planet						
5. to understand ecological, economical and medical, if present, significance of animals						
6. to have the ability to scientifically draw animals mounted on microscopic slides and to make short presentations with movies about different zoology topics in front of the students in lab sessions				X		

## 21. Topic Outline and Schedule:

Week	Lecture	Topic	Intended Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
1	1.1	Introduction Taxonomy Protozoan groups		Face to Face			Exams Discussions	See recommend- ed books below
	1.2			Face to Face			Exams Discussions	See recommend- ed books below
	1.3			Face to Face			Exams Discussions	See recommend- ed books below
2	2.1	Protozoan groups		Face to Face			Exams Discussions	See recommen- ded books below
	2.2			Face to Face			Exams Discussions	See recommend- ed books below
	2.3			Face to Face			Exams Discussions	See recommend- ed books below
3	3.1	Porifera		Face to Face			Exams Discussions	See recommend- ed books below
	3.2	Cnidaria		Face to Face			Exams Discussions	See recommend- ed books below

	3.3			Face to Face			Exams Discussions	See recommend- ed books below
4	4.1	Cnidaria Platyhelminthes		Face to Face			Exams Discussions	See recommend- ed books below
	4.2			Face to Face			Exams Discussions	See recommend- ed books below
	4.3			Face to Face			Exams Discussions	See recommend- ed books below
5	5.1	Platyhelminthes		Face to Face			Exams Discussions	See recommend- ed books below
	5.2			Face to Face			Exams Discussions	See recommend- ed books below
	5.3			Face to Face			Exams Discussions	See recommend- ed books below
6	6.1	Nematoda		Face to Face			Exams Discussions	See recommend- ed books below
	6.2			Face to Face			Exams Discussions	See recommend- ed books below
	6.3			Face to Face			Exams Discussions	See recommend- ed books below
7	7.1			Face to Face			Exams See recommend-	

		Rotifera					Discussions	ed books below
		Acanthocephala						
	7.2	Mollusca		Face to Face			Exams Discussions	See recommend- ed books below
	7.3			Face to Face			Exams Discussions	See recommend- ed books below
8	8.1			Face to Face			Exams Discussions	See recommend- ed books below
	8.2	Mollusca Annelida		Face to Face			Exams Discussions	See recommend- ed books below
	8.3			Face to Face			Exams Discussions	See recommend- ed books below
9	9.1			Face to Face			Exams Discussions	See recommend- ed books below
	9.2	Annelida Arthropoda		Face to Face			Exams Discussions	See recommend- ed books below
	9.3			Face to Face			Exams Discussions	See recommend- ed books below
10	10.1			Face to Face			Exams Discussions	See recommend- ed books below
	10.2	Arthropoda		Face to Face			Exams Discussions	See recommend-

								ed books below
	10.3			Face to Face			Exams Discussions	See recommend- ed books below
	11.1			Face to Face			Exams Discussions	See recommend- ed books below
11	11.2	Echinodermata		Face to Face			Exams Discussions	See recommend- ed books below
	11.3			Face to Face			Exams Discussions	See recommend- ed books below
	12.1	Protochor- data: Uro- and Cephaloch- ordata		Face to Face			Exams Discussions	See recommend- ed books below
12	12.2			Face to Face			Exams Discussions	See recommend- ed books below
	12.3			Face to Face			Exams Discussions	See recommend- ed books below
	13.1	Chordata: fishes		Face to Face			Exams Discussions	See recommend- ed books below
13	13.2			Face to Face			Exams Discussions	See recommend- ed books below
	13.3			Face to Face			Exams	See recommend-

							Discussions	ed books below
14	14.1	Chordata: amphibians, reptiles		Face to Face			Exams Discussions	See recommend-ed books below
	14.2			Face to Face			Exams Discussions	See recommend-ed books below
	14.3			Face to Face			Exams Discussions	See recommend-ed books below
15	15.1	Chordata: birds, mammals		Face to Face			Exams Discussions	See recommend-ed books below
	15.2			Face to Face			Exams Discussions	See recommend-ed books below
	15.3			Face to Face			Exams Discussions	See recommend-ed books below

## 22 Evaluation Methods:

Opportunities to demonstrate achievement of the CLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	CLOs	Period (Week)	Platform




### 23 Course Requirements

**(e.g: students should have a computer, internet connection, webcam, account on a specific software/platform...etc):**

### 24 Course Policies:

#### A- Attendance policies:

Absence from lectures should not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course.

#### B- Absences from exams and submitting assignments on time:

You should talk to your instructor as soon as possible if you miss an exam. All such cases will be dealt with according to the rules outlined in your student handbook.

#### C- Health and safety procedures:

Lab coat must be worn during the entire laboratory sessions. Gloves must also be worn in certain occasions.

Masks must be worn during the whole period of the lab session. In addition, physical distancing must be taken in consideration. Hands must be properly and thoroughly washed.

#### D- Honesty policy regarding cheating, plagiarism, misbehavior:

All violations pertaining to cheating, plagiarism, misbehaviour will be dealt with in accordance to the rules outlined in your student handbook.

#### E- Grading policy:

All exams are made up of the following question forms: multiple choice questions, True or False questions, matching questions, essay questions, "fill in the blank" questions.

#### F- Available university services that support achievement in the course:



## 25 References:

A- Required book(s), assigned reading and audio-visuals:

1. "Integrated Principles of Zoology". Latest Edition.  
By Hickman Jr., C. Keen, S., Larson, A., Eisenhour, D., I'Anson, H. and Roberts, L. Publisher: McGraw-Hill.
2. "Laboratory Studies in Integrated Principles of Zoology". 2006. 13<sup>th</sup> Edition.  
By Hickman Jr., C. and Kats, L.B. Publisher: McGraw-Hill.

B- Recommended books, materials, and media:

1. **Biology of the Invertebrates.** Pechenik, J.A. 2010. 6<sup>th</sup> Edition. Publisher: McGraw-Hill.
2. **Vertebrates: Comparative Anatomy, Function, Evolution.** 2009. Kardong, K.V. 5<sup>th</sup> Edition. Publisher: McGraw-Hill.

## 26 Additional information:

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Name of Course Coordinator: Prof. Hesham M. Al-Younes	Signature: -----
Date: 20.02.2023	
Head of Curriculum Committee/Department: Dr. Said Damhoureyeh	Signature: -----
Head of Department: Dr. Amer Imraish	Signature: -----
Head of Curriculum Committee/Faculty: Prof. Saber Al-Rousan	Signature: -----
Dean: Prof. Mahmoud I. Jaghoub	Signature: -----