## **Course Description Form**

1. Course Name: Zoology General 2. Course Code: GEZO123 3. Semester / Year: semester / 2023-2024 Autumnal fall 4. Description Preparation Date: 1 / 2024 5. Available Attendance Forms: My presence 6. Number of Credit Hours (Total) / Number of Units (Total) 75 hours /3.5units 7. Course administrator's name (mention all, if more than one name) Name: Abdul jabar kahlil and ammar manaf Email:jabar\_obadi@uomosul.edu.iq ammar .manaf@ uomosul.edu.iq Course Objectives

- Enabling the student to understand and assimil the general animal subject
- Knowing the importance of basic zoology
- Enabling the student to become familiar with anir science sources
- Enable the student to distinguish animals
- Enable the student to diagnose and classify anima
- Enabling the student to learn about the b practical methods in studying zoology And ways to deal with zoology in a practical applied way and learn about animals
  - 9. Teaching and learning strategies
- Interactive lectures
- Brainstorming
- Dialogue and discussion
- Assigning tasks and reports
- Displaying models of animals and identifying them
- Preparing reports and discussing with students " &
- Work collectively
- Preparing reports for each practical experience

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Hot	ırs	Required Learning	Unit or	Learning	Evaluation
		Outcomes	subject	method	method
			name		
Theore	tical2		Introduction	Auditory	Semester
		<ul> <li>a1: Learn about the concept of zoology,</li> <li>its benefits, introduction and</li> <li>definition of animals, and the</li> </ul>	to the	Methods	exam 1, final exam
		historical development of zoology	importance	Writing on	
		b1: He possesses the practical and mental knowledge and concepts that help him in studying animals	and	the board	
		c 3: Community members participat	branches	Direct	
		e and work to educate them about the importance of animals	of zoology	dialogue	
pract	ical 3			Interactive	Short Practical
		c 3: Uses the information the student needs and what is available	Types of	lecture, brainstorming,	test1
		to him to master how to use the microscope, its structure,	microscopes	dialogue and	
		and its function	,	discussion, self- learning	
Theore	etical2	a 2: The student explains the types of cells and the different foundations and		Interactive lecture,	Semester ex final
		elements of division and their types	Animal cell	brainstorming,	exam
				dialogue and discussion,	
ĺ		b1: The student writes the practical and mental knowledge and concepts that help			
		him know the types of cells		self-learning	
Practi	cal 3	c3: The student uses and			Direct Drawing
	<b></b>	discovers how to make and use microscopes		Interactive	of the parts
		and use inicroscopes	Use a	lecture, brainstorming,	of the
i.			microscope	dialogue and discussion,	microscope
				self-learning	
Theore	etical2	a 3: The student explains the	Cell division	theoretical:Audi	2
		different types of animal cell division and their importanc		methodsWritin	Semester ex final
		in the field of zoology		g on the board	exam
				Direct dialogue	
		b 1: Practicing thinking to		Interactive lecture,	Practical
Practi	cal 3	solve work problems in preparation		brainstorming,	evaluation
		c 3: Uses important methods for preparing slides	Preparing slides	dialogue and discussion,	
		Non-	700	field training,	
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4	Theoretical2	a 1: The student shows the different protoplasm and cytoplasm systems and their importance  b3: Distinguish the protoplasm cytoplasm systems  c 1: The student designs methods to understand protoplasm and cytoplasm in the field of zoology	Protoplasm and cytoplasm	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Semester test 1, final tes t, report
	Practical 3	C 3: The student uses the information he needs and what is available to him to master his work on the subject of animal ornaments  C4: The student employs modern techniques to provide a practical explanation of animal cells	Practical explanation of animal cells	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Practical quiz 2, direct drawing
5	Theoretical2	a 4: The student will be able to understand the theories of the origin of life  b 3: Participates with community members and works to educate them about the importance of the origin of life	Theories of the origin of life	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Semester test 1, final test , report
	Practical 3	C3: The student uses the information he needs in cell division b1: The student acquires coping skills in studying cell division	Cellular division	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Practical evaluation
6	Theoretical2	a 2: The student explains the different types of tissues and their importance in studying animals  b 4: The student demonstrates tissue identification skills	Tissue  المحادث المحادة المحا	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Short test , final test
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Practice Practice	of the schoo mode:  C3: Th inform what i	e student creates a study types of primary I division using rn computer applications e student uses the nation he needs and is available to him subject of primary school	Elementary Division	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Direct Drawing And homework
Theoretica	b 3: The method classification of the method	ne student evaluates ods for studying ication and naming e student designs ds for studying matters I to the classification of animals	Classification and scientific nomenclature	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Semester exam 2, final exam
Practica	methoclassificompustudy  c 3: Thinform classifiwhat ihis woca 4: Thodev classifi	ne student innovates new ods for studying ication of animal species and uses reter applications for  e student uses the ation he needs for cation and naming and s available to him to master ork e student draws programs elop the study of the cation of porosities in ld of zoology	Porosity	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Field project
Theoretica	b 1: The skills to import to 2: Apples in the invertee.	e student practices o study the ance of invertebrates blies modern technique field of studying brates in accordance he requirements of zoology	InvertebrateS	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Semester exam 2, fina l exam
Practical	to stud using n and has ways to c3: The informa	e student invents new ways y the cnidarians by hand, nodern computer applications, is the ability to learn good identify cnidarians.  student uses the ation he needs and available to him to master his work	Cnidarians  الم	Interactive lecture, brainstorming, dialogue and discussion,	Direct Drawing And homework

9	Theoretical2	a 1: The student's knowledge of the importance of digestion and absorption in animals  c 3: The student uses the information he needs and what is available to him to master his work in understanding the subject of digestion and absorption	Digestion and absorption	lecture, brainstorming, dialogue and discussion, field training, and self- learning	final exam
	Practical 3	c2: The student innovates new methods to study types of flatworms by hand and using modern computer applications c3: The student uses the information he needs and what is available to him to master his work	Flatworms	Interactive lecture, brainstorming, dialogue and discussion, field training, and self-learning	Direct Drawing And homework
10	Theoretical2	a 1: The student understands methods for studying the circulatory system of animals  c 4: The student evaluates t he use of methods to study the circulatory system in animals	Circulatory device	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Semester test2
	Practical 3	c 1: The student designs new methods to study bagworms by hand and using computer applications  c 3: The student uses the information he needs and what is available to him t o master his work to understand the topic of bagworms	Bagworms	Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning	Direct Drawing And homework
11	Theoretical2	b2: The student expresses the importance of respiratory systems and types of breathing  c1: The student will be able to use the computer in breathing methods and employ them in a way that is compatible with the study of zoology	Breathing	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Final Test
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tical				Interactive	Direct
	Practical 3	c 2: The student invents new methods for species of the annelid phylum by hand and using modern computer applications c3: The student uses the information and resources available to him to master his work	Annelids	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Direct Drawing And homework
12	Theoretical2	a 1: The student is able to understand the importance of waste excretion systems in animals c 4: The student develops methods for studying the excretory system in zoology	The excretory system	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Final test
	Practical 3	C2: The student identifies the articular division of the leg C3: The student uses the information he needs and what is available to him to master his work	Articulated feet	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Direct drawing and homew
13	Theoretical2	a2: The student explains the importance of the nervous system  b3: The student discusses the information and what is available to him to master the work of studying the nervous system	Nervous system	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Final test
	Practical 3	C 2: The student identifies new methods for types of soft material s by hand and using modern computer applications  C 3: The student prepares th e information he needs in the Al-Nawaem Division and wha is available to him to master his work	mollusca	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Direct drawing and homework
14	Theoretical2	b 1: The student practices new methods for studying the phylum Echinodermata by hand and using modern computer applications	Chemical coordination	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Short test , final test

	Practical 3	C3: The student prepares the information he needs about the phylum Echinodermata and what is available to him to master his work  D17: He is proficient in the skills of communicating with modern technology efficiently, enabling him to accomplish his scientific and practical tasks	Echinodermata	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Short practical test3
15	Theoretical2	a1: The student innovates new ways to study the skeleton by hand and using modern computer applications  c4: The student develops his abilities to study the skeleton and use it in a manner consistent with the goals of zoology	The skeleton and the rest of the themes	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Short test , final test
	Practical 3	b3: The student uses the information he needs and what is available to him to master his work on the subject of chordates and anatomy  C 1: The student acquires skills in the subject of anatomy	Chordates and frog anatomy	Interactive lecture, brainstorming, dialogue and discussion, self- learning	Practical Report

## 11. Course Evaluation

	Calendar methods	Evaluation date (one week)	Grade	Relative weight %
1	Report 1	fourth week	2.5	2.5
2	Report 2	The fifth week	2.5	2.5
3	Short test (1) Quiz	the sixth week	2	2
4	Short test (2) Quiz	The fourteenth week	2	2
5	Short test (3) Quiz	The fifteenth week	1	1
6	Semester test (1)	the sixth week	7.5	7.5
7	Semester test (2)	The eleventh week is difficult	7.5	7.5
8	Final theoretical test	Final semester exams	40	40
9	Report 3	The fifteenth week	المحمة الموصال المحمة الموصال المحمد الموصال المحمد الموصال المحمد الموصال المحمد الموصال المحمدة الم	5
10	Homework	The third and fifth week	,2	2

12	Practical short test (1) Quiz Short practical test (2) Quiz	The first week fourth week	0.5	0.5
13	Short practical test (3) Quiz	The fourteenth week	1	1
14	Live graphics	Weeks 6, 8, 9, 10, 11, 12 and 13	5.5	5.5
15	Final practical test	Final semester exams	20	20
	the total		100	100%

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Shlimon Najm and Zuhair Fattuhi (1989), General Zoology, Mosul University, Dar Al-Kutub Publishing House, 644 pages.
Main references (sources)	- Abu Sunna Jamal and others (2003), Zoology, Dar Al-Fikr, Amman, 765 pages.
	2- Abu Tarbush Faisal and others (2002) Principles of Practical Zoology, King Saud University. Scientific Publishing, 189 pages.
Recommended books and references (scientific journals, reports)	Stephen A.andJohn P(.2007) Zoology ,7Edition, publish mnGraw –Hill Inc Avenue of America New York ,558 p
Electronic References, Websites	Scientific researcher and journals in zoology and Reserch gate



Theoretical subject teacher Dr. Abdul-Jabbar K. Ibrahim

Practical subject teacher Ammar Manaf Mohammed



Chairman of the Scientific Committee Professor Dr. Juhaina Idris Mohamed



Head of Plant Protection Department Dr Firas Kazem Daoud Al-Jubouri



