Course Description Form

1. Course Name:

General Zoology

2. Course Code:

GEZO123

3. Semester / Year:

autumnal fall semester / 2023-2024

4. Description Preparation Date:

1/4 /2024

5. Available Attendance Forms:

My presence

6. Number of Credit Hours (Total) / Number of Units (Total)

2 theoretical + 3 practical / 3.5 units

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

8. 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 a 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

10. Course Structure

| Week | Hours | Required Learning Outcomes | Unit or | Learning | Evaluation |
|------|--------------|---|--|---|--|
| | | | subject | method | method |
| | | | name | | |
| 1 | Theoretical2 | a1: Learn about the concept of zoology, its benefits, introduction and definition of animals, and the historical development of zoology b1: He possesses the practical and mental knowledge and concepts that help him in studying animals c 3: Community members participat e and work to educate them about the importance of animals | Introduction to the importance and branches of zoology | Auditory Methods Writing on the board Direct dialogue | Semester exam 1, final exam |
| | practical 3 | c 3: Uses the information the student needs and what is available to him to master how to use the microscope, its structure, and its function | Types of microscopes | Interactive lecture, brainstorming, dialogue and discussion, self- learning | Short Practical test1 |
| 2 | Theoretical2 | a 2: The student explains the types of cells and the different foundations and elements of division and their types b1: The student writes the practical and mental knowledge and concepts that help him know the types of cells | : Animal cell | Interactive lecture, brainstorming, dialogue and discussion, self-learning | Semester 1, final exam |
| | Practical 3 | c3: The student uses and discovers how to make and use microscopes | Use a microscope | Interactive lecture, brainstorming, dialogue and discussion, self-learning | Direct Drawing of the parts of the microscop |
| 3 | Theoretical2 | a 3: The student explains the different types of animal cell division and their importanc in the field of zoology | Cell division | theoretical:Audi tory methodsWritin g on the board Direct dialogue | Semester 1, final exam |

| | Practical 3 | b 1: Practicing thinking to solve work problems in preparation c 3: Uses important methods for preparing slides | Preparing slides for xamination | Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning | Practical evaluation |
|---|--------------|---|--|---|---|
| 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 | | | Interactive | |
|---|--------------|---|------------------------|---|---|
| | | 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 | | 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 | Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning | Short test , final test |
| | Practical 3 | C2: The student creates a study of the types of primary school division using modern computer applications C3: The student uses the information he needs and what is available to him in the subject of primary school | Elementary Division | Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning | Direct Drawing And homewo |

| 7 | Theoretical2 | b 3: The student evaluates methods for studying classification and naming c 1: The student designs methods for studying matters related to the classification of animals | Classificatio n and scientific nomenclatu re | Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning | Semester 2, final exam |
|---|--------------|--|--|---|--------------------------------------|
| | Practical 3 | C 1: The student innovates new methods for studying classification of animal species and modern computer applications for study c 3: The student uses the information he needs for classification and naming and what is available to him to master his work c 4: The student draws programs to develop the study of the classification of porosities in the field of zoology | Porosity | Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning | Field project |
| 8 | Theoretical2 | b 1: The student practices skills to study the importance of invertebrates c 2: Applies modern technique s in the field of studying invertebrates in accordance with the requirements of zoology | Invertebrat es | Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning | Semester 2, fina 1 exam |
| | Practical 3 | c 2: The student invents new ways to study the cnidarians by hand, using modern computer applications, and has the ability to learn good ways to identify cnidarians. c3: The student uses the information he needs and what is available to him to master his work | Cnidarians | Interactive lecture, brainstorming, dialogue and discussion, field training, and self- learning | 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 | : Digestion and absorption | Interactive lecture, brainstorming, dialogue and discussion, field training, and self- | Semester 2, final exam |

| | | of digestion and absorption | | learning | |
|----|--------------|---|-----------------------|---|--------------------------------------|
| | 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 homeworl |
| 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 |

| 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 |
|--------------|---|--|---|--|
| 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 homework |
| 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 homework |
| Theoretical2 | b 1: The student practices new methods for studying the phylum Echinodermata by hand and using modern computer applications | Chemical coordinatio n | Interactive lecture, brainstorming, dialogue and discussion, self- learning | Short test , final test |
| | Theoretical2 Practical 3 Theoretical2 | 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 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 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 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 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 the information he needs in the Al-Nawaem Division and wha is available to him to master his work Theoretical2 b 1: The student practices new methods for studying the phylum Echinodermata by hand and using modern | Practical 3 Practical 3 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 Theoretical2 a 1: The student is able to understand the importance of waste excretion systems in animals c4: The student develops methods for studying the excretory system in zoology 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 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 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 the information he needs in the Al-Nawaem Division and wha is available to him to master his work Theoretical2 b 1: The student practices new methods for studying the phylum Echinodermata by hand and using modern Chemical coordinatio in needs in the hylum Echinodermata by hand and using modern | Practical 3 Practical 4 Practi |

| | 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 | Echinoderm ata | 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 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 | 5 | 5 |
| 10 | Homework | The third and fifth week | 2 | 2 |
| 11 | Practical short test (1) Quiz | The first week | 1 | 1 |
| 12 | Short practical test (2) Quiz | 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 | | | |

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Theoretical subject teacher : Dr. Abdul-Jabbar Khalil Ibrahim

Practical subject teacher:

Ammar Manaf Muhammad

Head of the Scientific Committee in the Plant Protection Department

Prof. Dr. Muthanna Ahmed Muhammad

Department Head: Prof. Dr Omar Diaa Muhammad