



Department of

Biology

College of Education

Salahaddin University

Subject: Practical Zoology

Course Book – (Year: 1)

Lecturer's name: Ms. Jwan Dilshad Tawfiq

Academic Year: 2022/2023

Course Book

1. Course name	Practical Zoology
2. Lecturer in charge	Jwan Dilshad Tawfiq
3. Department/ College	Biology Dept./ College of Education
4. Contact	e-mail: jwan.tawfiq@su.edu.krd
5. Time (in hours) per week	Practical: 8 hrs
6. Office hours	8 hrs
7. Course code	
8. Teacher's academic profile	I teach practical zoology at the Biology Department/ College of Education. I have got a master's degree in medical microbiology from the college of science at Salahaddin University, Erbil, 1993. I finished my bachelor's degree at the Biology Department/ College of Education of Salahaddin University in 1988. On 21/9/1988, I started working with my department. I have 34 years of experience with my job.
9. Keywords	
10. Course overview:	<p>Zoology can be defined as the study of the simplest part of the body's cells and tissues. The Cell: is the fundamental structural and functional unit of all living organisms. Cytology is a branch of biology, that deals with the study of cells in terms of structure, function, and chemistry.</p> <p>Classification of cells: There are two major types of cells: prokaryotic and eukaryotic.</p> <p>The main difference between these two cell types is that Prokaryotic cells do not have a nuclear membrane. The nuclear material consists of a single chromosome and lies in the cytoplasm. The nuclear region is called the nucleoid. Organelles are absent. Such as bacteria. Cells come in many different sizes. Some cells are visible to the naked eye (such as eggs of birds); however, most cells are microscopic and cannot be seen by the naked eye. Cells also come in many different shapes (e.g., spindle, aster, oval, spherical, cylindrical)</p> <p>Animal cell</p> <p>The animal cell is a typical eukaryotic cell. It is surrounded by a plasma membrane, which forms a selective barrier allowing nutrients to enter and waste products to leave. Unlike prokaryotic cells, DNA in animal cells is housed within the nucleus. In addition to having a nucleus, the cytoplasm contains specialized organelles, each of which is surrounded by a membrane. There is only one nucleus, and it contains all the genetic information necessary for cell growth and reproduction. The other organelles occur in multiple copies and carry out the various functions of the cell, allowing it to survive and participate in the functioning of the larger organism.</p>
11. Course objective:	The practical zoology objectives are about the introduction for first grade students, the structure and functions of all the cells and tissues in animal bodies' constituents, with making their ability to distinguish between each type of cells and tissues. And all the necessary requirements of the zoology lab will be introduced to them with details of their functions.

To understand and Learning

1. Main safety rules of working in the lab.
2. Types of tissue.
3. Methods of dissecting.
4. Slide preparation, and staining.

12. Student's obligation

The students should do their homework every week by preparing for quizzes and doing their lab. Procedures every week by themselves. Assessment of their homework or procedure will be the standard for their evaluation in labs. Bringing frogs and introducing them to the structure and habitat of frogs after the anatomy of frogs will be studied.

To get the best out of the course, it is suggested that you attend classes as much as possible, read the required lectures, and teacher's notes, and be ready for the weekly quiz. Try as much as possible to participate in classroom discussions, and prepare the assignments given in the course.

13. Forms of teaching

Several teaching methods are used to achieve the learning outcomes of the course including PowerPoint presentations, whiteboard writing, giving illustrations about the principles of zoology, and slide and sample demonstrations. Additionally, the classroom discussion is an asset to give the lecture more vitality and to reach enough background and information to the students.

14. Assessment scheme

Breakdown of overall assessment and examination

The students are required to do two or three practical exams (theory/ practical or practical/practical) at different periods of the semester. The final examination has 13 marks. So that the final grade will be based upon the following criteria:

Mean of three (including quizzes) examinations: 13%

Final Practical Examination: 35%

15. Student learning outcome:

Practical zoology is the basic science in biology; the basic unit of life is cells and tissues. Here the students should have knowledge about them the huge differences between each of them. Zoology is about everything in the environments that we live in, having knowledge of the particle units and their functions of them and how they work together to form a unique body with high bodily performance functions.

16. Course Reading List and References:

1. Miller, S. and Harley, J. (2001). Zoology.5th ed.
2. الحسيني، أماني احمد حماد. بيولوجية الحيوان العملية باللغتين العربية والانجليزية.

17. The Topics:

Lecturer's name

<p>18. Practical Topics (If there is any)</p>																															
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<p>19. Examinations:</p> <ul style="list-style-type: none"> ● Compositional ● Comparison ● Multiple choices ● Fill in the blanks ● True or false and correct the false statements ● Definition ● Drawing and Labelling 																															

20. Extra notes:

21. Peer review پيداچووننهوهى هاوهل