Department of General Sciences

College of Basic Education

University of Salahaddin Subject: General sciences (Biology)/higher education students

Course Book

Lecturer's name: Suhaira Waleed Abdullah (PhD)

Academic Year: 2023/2024

Course Book

1. Course name	**General Sciences(Biology)**
2. Lecturer in charge	**Suhaira Waleed Abdullah**
3. Department/ College	General Sciences
4. Contact	**e-mail:** suhaira.abdullah@su.edu.krd **07512240145**
5. Time (in hours) per week	**Theory: 2**
6. Office hours	**Thursday (10:30-12:30)**
7. Course code	--
8. Teacher's academic profile	MSc. Degree: In Biology (Biology DEPARTMENT) Working as an assistant lecturer in Dohuk University I worked as a lecturer in college of Veterinary (1st stage teaching Zoology &Histology) and college of Education (2nd stage teaching Histology & Embryology) , also member in Biology syndicate in Hawler, Taking a course on teaching method in 2001. 2013 PhD.Biology /Entomology Since 2006-2019 I worked as lecturer in Agriculture College teaching undergraduate &postgraduate students (General Biology and Physiology) a lecturer in Physiotherapy department /Health Technical College from 2019-2021 1st physiotherapy students (Human physiology) 2nd physiotherapy students (Pathology) 4th MLT Clinical microbiology. Now I am a lecturer and academic staff of General Sciences/Basic Education college/Salahhadeen University

	1.Identification and effect of essential oil compounds of perus rotunds in the biological and quantity of DNA in *boliuum castaneum*.(published)., 2. Identification of Gallic acid and Hydroquinone in the Propolis and their effects on ovaries of Khapra beetle *Trogoderma granarium* Everts Coleoptera:Dermestidae
9. Keywords	

10. Course overview:

Biology , the study of life, aims to understand the behaviour, structure and evolution of animals and plants. **Zoology** is a branch of biology which specializes in the study of animals both living and extinct, including their anatomy and physiology, embryology, genetics, evolution, classification, habits, behavior and distribution. If you're fascinated by and love animals.

The study of animals involves a review of biological principles, themes of all life, chemistry of all life, and homeostasis of the cellular processes.

The study of evolution of animals involves a review of genetics, evolutionary principles, population dynamics, reproduction strategies, and complexity of animal development.

The study of the diversity of animals involves reviewing the characteristics (structures and functions) and classification of the animal kingdom.

The study of the activity of life involves a review of major body systems (structures and functions), body systems interacting, and organisms maintaining homeostasis.

The study of animals and their environments involves connecting the abiotic-biotic parts of a biome with the diversity/distribution of animals.

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11. Course objective:

- In our practical zoology lectures we aim to teach the students how to use a microscope and teach them the principles of histology and identification of different types of cells and tissues in the living organisms**.**

We aim to provide you with a broad base of organisms knowledge, with the opportunity to specialize later on. Specialist topics include animal behavior, conservation biology, ecology and animal physiology.

Previous completion of biology course focused on biological themes/principles, chemistry of life, cell organelles, and cell processes.

Previous completion of biology course focused on generics, evolution, reproduction, and development.

Previous completion of biology course focused on characteristics and classifications of invertebrate and vertebrate animals.

Previous completion of biology course focused on homeostasis of body systems and animal behaviors.

- Previous completion of biology/ecology course focused on the biosphere and abiotic-biotic interactions.

Discuss tissue injury and diseases processes, using appropriate vocabulary.

Recognize morphological and functional differences between normal and injured or diseased tissue.

Recognize the different types of pathological lesions and their causes.

- Integrate pathological findings with clinical manifestations of disease.

12. Student's obligation

- The students are expected to attend all lectures on time.
- The students are required to participate during the lectures.
- After each lecture, the students will have quiz about the lecture.
- The students will have two course examinations and one final examination.
- Students are expected to attend all classes. The official college attendance policy is followed. Attendance in each class is counted from the first day the student is eligible to attend the class as given on the student's assessment sheet registration card or student change notice. Student may obtain an excuse for the emergency absence from the dean of students upon presentation of satisfactory documentation.

13. Forms of teaching

Different forms of teaching will be used to make the subject clear for the students:

- Power Point Presentations will be presented on projector to show the students the

histological slides which helps students to understand the subject.

- Also lectures will be given to students ahead of time that helps to make the student's attention on the subject.
- Histological diagrams will be drawn by the lecturer on whiteboard to let the students understand the subject more easily and clearly.

14. Assessment scheme

- The marks of the subject will be given on quizzes, 2 course examinations, and final examination.

15. Student learning outcome:

- After finishing this course, the students will be able to identify the different parts of microscope and learn how to use it.

The students will be able to identify different types cells and tissues Discuss tissue injury and diseases processes, using appropriate vocabulary.

Recognize morphological and functional differences between normal and injured or diseased tissue.

Recognize the different types of pathological lesions and their causes.

- Integrate pathological findings with clinical manifestations of disease..

Students will demonstrate
knowledge of characteristics of life, themes in life sciences, and application of homeostasis from cellular level to ecological level for animal species.
Students will demonstrate knowledge of genetics, evolution of life, animal reproduction, and development and apply the characteristics of life for all animals.
Students will demonstrate knowledge of taxonomy/ classification system of animals using characteristics unique to that group of organisms.
students will demonstrate knowledge of understanding the major body stems (structures and functions) to how the organism can maintain homeostasis.

- Students will demonstrate knowledge of how animals' structures and behaviors relate to the biome they reside in.

16. Course Reading List and References:

Key reference:

diFiore's Atlas of Histology with Functional Correlations.

1. Pechenik, Jan A. Biology of the invertebrates *seventh edition.* 2015. *Tufts University* p 652.
2. Pough, F. Harvey *et al*,.Vertebrate life, nine edition.2013. Pearson. P 729

17. The Topics:

Weeks	Topics
1	Introduction to the Biology
2	Apoptosis and necrosis Bones …
3	Pathology ,IMMUNE SYSTEM
4	Burn &Healing …
5	Exam

19. Examinations: In examinations, there are various types of question mainly (single choice question, iidentifying slides , and short essay questions.
20. Extra notes:
21. Peer review: