Department of Biology

College of Education

Salahaddin University-Erbil

Subject: General Zoology (Theory)

Course Book – (Year: 1)

Lecturer's name: Sarwat Ekram AL-Qassab – Ph.D.

Academic Year: 2023-2024

Course Book

1. Course name	**General Zoology - Theory**
2. Lecturer in charge	**Sarwat Ekram Mohammed Al-QASSAB**
3. Department/ College	**Biology Dept./ College of Education**
4. Contact	**e-mail: sarwat.mohammed@su.edu.krd**
5. Time (in hours) per week	**2 hrs**
6. Office hours	**2 hrs**
7. Course code	**BE105**
8. Teacher's academic profile	**Academic Qualifications:** • **2009 Ph D. Molecular Parasitology** / Department of Medical and Molecular Biosciences - University of Technology Sydney – Australia. • **1991 M Sc. Invertebrate Zoology** / Department of Biology - College of Science – Salahaddin University – Erbil – Iraq. • **1987 B Sc. Microbiology** / Department of Biology - College of Science – Salahaddin University – Erbil – Iraq.
9. Keywords	

10. Course overview:

Zoology is a gateway or foundation course for majors in zoology or other biologically-related fields. It is the scientific study of all aspects of animal life, their structure, the function of organ systems, animal behaviour, and ecology. We will emphasize on subjects that will not covered in detail in future courses. This course is designed to provide the student with basic information and vocabulary in preparation for advanced courses in zoology and biology. Most students find the subject to be fascinating and fun but also challenging and demanding because of the material's diversity, complexity, number of new, unfamiliar topics, and associated names and terms -- almost like learning a new language for most people.

11. Course objective:

- Students will learn specialized terminology and basic concepts of zoology.
- Students will learn basic, selected external and internal structures and associated biology/function for different kinds of animals.
- Students will learn to integrate all of the above.
- Students will come to appreciate and enjoy the subject of zoology (i.e., have fun) and be able to place the subject in the larger context of human knowledge and experience on a global scale.

12. Student's obligation

- The grade will be determined by following assessment: Quizzes and Exams (Mid-Course exam and final course exam). **5%** of grade will be applied to quizzes.
- For the General Zoology subject, the grade will be **50** degrees (**15** degrees for theory and **35** degrees for practical). The final course exam will be on **50** degrees (only theory).

13. Forms of teaching

MS Powerpoint through **data-show** we be applied in our lectures. Use the whiteboard for further explanations. Lecture notes will be given in advance to the students.

14. Assessment scheme

- The grade will be determined by following assessment: Quizzes and Exams (Mid-Course exam and final course exam). **5%** of grade will be applied to quizzes.

For Introduction to Zoology subject, the grade will be **50** degrees (**15** degrees for theory and **35** degrees for practical). The final course exam will be on **50** degrees (only theory).

15. Student learning outcome:

After this subject, students are expected to be able to:

a) Understand and describe the relationship between structure and function in the organisation and survival of animals.
b) Demonstrate an understanding of the methods used in zoology and explain how scientific knowledge is contestable and testable by further inquiry and recognise the importance of biodiversity for sustaining life on our planet.
c) Think critically in terms of their learning and research.
d) Evaluate critically the published literature.
e) Assess and implement the practical techniques necessary to solve a particular biological problem.

❖ This course will provide the basic knowledge for the student about animal science which will be very useful in preparation to be a teacher in biological sciences at secondary school.

16. Course Reading List and References:

▪ **Key References (Books):**

Reece, J. B. and others (2017) **Campbell biology**. Pearson, Boston.

Madr, S. (2016) **Biology**. McGraw Hill Higher Education, Boston.

Miller, S. A. and Harley, J. P. (2016) **Zoology**. McGraw Hill Higher Education, New York.

Hickman, C. P. and others (2017) **Integrated principals of zoology**. McGraw Hill Higher Education, New York.

Magazines and reviews (internet):
https://en.wikipedia.org/wiki/Main Page

http://www.the-science.com/

Cell biology animation: http://www.johnkyrk.com/index.html

17. The Topics:	**Lecturer's name**
Lecture 1: **Cell membrane**	Dr. Sarwat Al-Qassab (2 hr) 29/01/2024
Lecture 2: **Intercellular Junctions & Cytoskeleton**	Dr. Sarwat Al-Qassab (2 hr) 5/02/2024
Lecture 3: **Centrosome & Centriole** **Cilia & Flagella**	Dr. Sarwat Al-Qassab (2 hr) 12/02/2024
Lecture 4: **Properties of living systems**	Dr. Sarwat Al-Qassab (2 hr) 19/02/2024
Lecture 5: **Cell Division - Mitosis**	Dr. Sarwat Al-Qassab (2 hr) 26/02/2024
Lecture 6: **Cell Division - Meiosis**	Dr. Sarwat Al-Qassab (2 hr) 04/03/2024
Lecture 7: **Taxonomy and Classification**	Dr. Sarwat Al-Qassab (2 hr) 11/03/2024
Lecture 8: **Integumentary Systems**	Dr. Sarwat Al-Qassab (2 hr) 25/03/2024
Lecture 9: **Digestion and absorption system**	Dr. Sarwat Al-Qassab (2 hr) 01/04/2024
Lecture 10: **Circulation system**	Dr. Sarwat Al-Qassab (2 hr) 08/04/2024
Lecture 11: **Respiration system**	Dr. Sarwat Al-Qassab (2 hr) 15/04/2024
18. Practical Topics (If there is any)	

19. Examinations:

1. Compositional: In this type of exam the questions usually start with Explain how, What are the reasons for…?, Why…?, How….?

Example: **Define Biology**

Answer: **Biology is a natural science concerned with the study of life and living things, including their structure, function, growth, evolution, distribution, and taxonomy.**

2. True or false type of exams:

Example**: Cytology is the science of studying tissue.**

Answer**: False,** the right answer**: is the science of studying cell.**

3. Multiple choices:

Example: **Histology is the study of _____.**

A. Cell B. Tissue C. Classification.

20. Extra notes:

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21. Peer review

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