University of Salahaddin

College of Science

Department of Biology

Subject: Practical Zoology

Course Book: First class

Lecturer's name: Shna Ibrahim Ismail

Academic Year: 2023-2024

Course Book

1. Course name	**Practical Zoology**
2. Lecturer in charge	**Shna Ibrahim Ismail**
3. Department/ College	**Biology/ Science**
4. Contact	**e-mail: shna.ismail@su.edu.krd**
5. Time (in hours) per week	**2 hrs./week**
6. Office hours	**2 hrs./week**
7. Course code	**SBio 105**
8. Teacher's academic profile **Shna Ibrahim Ismail**	During 2004-2008 studied BSc in biology at college of science/university of Salahaddin and graduated by obtaining third rank among my class with average grade 81.9%. In March 2009 Joined academic staff as assistant biology in Salahaddin University /College of Science /Biology Department. In December 2012 applied for postgraduate study at the same department and got my MSc degree in medical mycology in august 2015. In July 2020 achieved my academic title as assistant lecturer and started teaching in my department till now. • I participated in some courses including the followings: 1. Computer Training course in 2011 in the same university. 2. Teaching Methods Course in 2015 in the same university.
9. Keywords	**Microscope, Cell, Cell theory, Mitosis, Meiosis, Tissues, Invertebrates, Nomenclature, and Classification.**

10. Course overview:

- History of Zoology
  Microscope structure and its uses.
- The importance of studying the Zoology
- How cells divide.
  Differences between mitosis and meiosis.
- Tissues and it is types.

- Epithelial tissues definition and types.
- Connective tissue and it is types.
- Muscular and nervous tissues.
- Scientific classification of living organisms.
- Kingdom Protista.
- Kingdom Animalia and it is phyla including Porifera, Cnidaria, Platyhelminthes, Annelida, Mollusca, Echinodermata, Arthropoda, and chordata.
- Frog dissection

11. Course objective:

- The course will cover Zoology, which is the science that deals the animal life. The "Zoology" is come from "the Greek word" Zoo = animal" and "Logos = science".
- In the Zoology laboratory, Students will see different specimens and slides to study how animals constructed and ask about their parts function.
- The course will give students a good understanding about a number of animal characteristic topics, as: Growth, Life cycles, Forms of animals, Ecosystems of animals, Morphological appearance, Evolutionary relationships, Taxonomy of animals.

12. Student's obligation

- **Exam policy:** Student Should take at least 2 exams during the course.
- **lab polices:**

1. **Attendance:** You are strongly encouraged to attend class on a regular basis, as participation is important to your understanding of the material. You are responsible for obtaining any information you miss due to absence.
2. **Lateness:** Lateness to class is disruptive.
3. **Electronic devices:** All cell phones are to be turned off at the beginning of class and put away during the entire class.
4. **Talking:** During class please refrain from side conversations. These can be disruptive to your fellow students and your professor
5. **No Disrespectful to both the teacher and to your colleagues**.
6. **Weekly Quizzes**: every lab you should take quiz
7. **Lab coat**: you have to wear your lab coat to your protection.
8. **Eating and drinking is prohibited inside the lab.**
9. **You should monitor and records your practical works and results.**

13. Forms of teaching

- Course book
- Data show and power point.
- Scientific videos.
- Soft and hard copy lectures
- Papers for practical work and notes.
- Whiteboard.

14. Assessment scheme:

Exam	**15 marks**
Lab Report	**6marks**
Weekly Quizzes	**6 marks**
Lab copy book	**8 mark**
Total	**35 marks**

15. Student learning outcome:

- The importance of studying Zoology.
- Students will see different specimens and slides to study how animals constructed and ask about their parts function.
- a good understanding about a number of animal characteristic topics, as: Growth, Life cycles, Forms of animals, Ecosystems of animals, Morphological appearance, Evolutionary relationships, Taxonomy of animals.
- Dissecting of frog.
- Scientific classification of living organisms.
- A good knowledge about Kingdom Protista.
- A good knowledge about Kingdom Fungi.
- A good knowledge about Kingdom Animalia and it is phyla including Porifera, Cnidaria, Platyhelminthes, Annelida, Mollusca, Echinodermata, Arthropoda, and chordate.

16. Course Reading List and References:

1. Fundamentals of Zoology, 2008, by Ghose K.C. and B. Manna, New Central Book Agency, Ltd. India.
2. Laboratory Studies in Integrated Principles of Zoology", 1997, by C. P. Hickman; F. M. Hickman and L. Kats, 9th Edition, WCB McGraw - Hill companies, New York.
3. Animal Diversity, 2002, Cleveland P. Hickman, Jr., Larry S. Roberts, Allan Larson, 3rd edition, McGraw - Hill companies, New York. Soft-copy.
4. And any other zoology books published recently.

17. Practical Topics

First Semester

Week 1:
Course outline and hints for student's safety and academic success.

Week 2:
Introduction to Zoology, Microscope

Week 3:
Diversity of the Cells

Week 4:
Cell division, Mitosis

Week 5:
Meiosis

Week 6: 1st Exam.
Week 7:
Tissues: Epithelial Tissue
Week 8:
Connective Tissue
Week 9:
Special Connective Tissue
Week 10:
Muscle Tissue & Nervous Tissue
Week 11: 2nd Exam.

Second Semester

Week 1:
Classification, Kingdom: Protista
Week 2:
Kingdom: Animalia
Subkingdom: Parazoa
Phylum: Porifera
Week 3:
Subkingdom: Metazoa
Phylum: Cnidaria (Coelentrata)
Week 4:
Phylum: Platyhelminthes (Flatworm)
Phylum: Nemathelminthes or Aschelminthes
Week 5:
Phylum: Annelida (Segmented worms or Vermes)
Week 6: 1st Exam.
Week 7:
Phylum: Arthropoda
Week 8:
Phylum: Mollusca (Soft)
Week 9:
Phylum: Echinodermata (Spiny Skin)
Week 10:
Phylum: Chordata, part-1
Week 11:
Phylum: Chordata, part-2
Week 12: 2nd Exam.
Week 13:
Frog Dissection

18. Examinations:

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

2. sample identifying:

Example: identify this test (in the picture or direct) **3.fill the blanks:** **Example:** In prophase centrioles begin to separate, each forming around itself a system of microtubule called .....even longer microtubule called ……
20. Extra notes: No notes
21. Peer review **Peer name:**