|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |
| --- |
| **TISHK INTERNATIONAL UNIVERSITYFACULTY OF EDUCATIONDepartment of BIOLOGY EDUCATION,2020-2021 FallCourse Information for BIO 101 PRINCIPLES OF ZOOLOGY** |

|  |  |
| --- | --- |
| **Course Name:** | PRINCIPLES OF ZOOLOGY |
|

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Code** | **Regular Semester** | **Theoretical** | **Practical** | **Credits** | **ECTS** |
| BIO 101 | 1 | 2 | 2 | 3 | 4 |

 |
| **Name of Lecturer(s)-Academic Title:** | Soran Kayfi - |
| **Teaching Assistant:** | Dr. Samir |
| **Course Language:** | English |
| **Course Type:** | Main |
| **Office Hours** | 2 |
| **Contact Email:** | soran.kayfi@tiu.edu.iqTel:07504302814 |
| **Teacher's academic profile:** | MSc |
| **Course Objectives:** | Quite simply, zoology is the division of biology that deals with the animal kingdom. It’s the scientific study of everything having to do with animals, just as botany is the scientific study of plants. Zoology is a huge field that covers the classification of every animal on earth as well as many broader fields of experimentation and inquiry related to animal life, and the field keeps expanding |
| **Course Description (Course overview):** | This course introduces the principles and concepts of Zoology. Its concepts as illustrated in the structure, behavior, ecology, development, physiology, function and evolution of animals. Emphasis is on self-regulatory mechanisms, especially in the vertebrates, and their adaptive significance |
| **COURSE CONTENT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Hour** |               **Date**               | **Topic** |
| **1** | 2 | 13-17/12/2020 | The life and living things |
| **2** | 2 | 20-24/12/2020 | The animal Cell |
|  |  |  |  |
| **3** | 2 | 27-31/12/2020 | Classification |
| **4** | 2 | 3-7/1/2021 | Adaptation |
|  |  |  |  |
| **5** | 2 | 10-14/1/2021 | Ecosystems |
| **6** | 2 | 17-21/1/2021 | Groups of animals |
|  |  |  |  |
| **7** | 2 | 24-28/1/2021 | Midterm Exam |
| **8** | 2 | 31/1-4/2/2021 | Identification keys |
|  |  |  |  |
| **9** | 2 | 7-11/2/2021 | Darwin and evolution |
| **10** | 2 | 14-18/2/2021 | Invertebrates |
|  |  |  |  |
| **11** | 2 | 21-25/2/2021 | review |
| **12** | 2 | 28/2-4/3/2021 | Final Exam |
|  |  |  |  |
| **13** | 2 | 7-11/3/2021 | Final Exam |

 |
| **COURSE/STUDENT LEARNING OUTCOMES**

|  |  |
| --- | --- |
|  |  |
| **1** | What we mean by Zoology? |
| **2** | Branches of Zoology |
| **3** | The cell and the life |
| **4** | Adaptations |
| **5** | Development |

 |
| **COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES**(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced )

|  |  |  |
| --- | --- | --- |
|  | **Program Learning Outcomes** | **Cont.** |
| **1** | Write accurately and clearly about biology topics that conform to the scientific conventions of that field. | P |
| **2** | Describe the molecular components of living things, their heredity transformations and the main concerns in these biological process | I |
| **3** | Identify and analyze the microorganisms including bacteria, fungi and virus and their roles in nature. | P |
| **4** | Characterize the features of plant organs/tissues/cells/organelles involved in cellular respiration, photosynthesis, reproduction and growth. | P |
| **5** | Describe the micro and macro anatomy of the living systems and recognize the relationship between structure and function at all biological systems and levels. | I |
| **6** | Apply safety and proper techniques in the laboratory, and report the results of conducted experiments. | P |
| **7** | Use appropriate methods and techniques to improve their students’ critical thinking, creative thinking and problem-solving skills. | P |
| **8** | Effectively organize and manage classrooms. | I |
| **9** | Use required methods and techniques for student-centered teaching by considering individual and cultural differences of students. | P |
| **10** | Develop research studies that applies quantitative or qualitative research methods that address research questions in the field. | I |

 |
| **Prerequisites (Course Reading List and References):** | http://www.multites.com/lessons.htm Getting Started with MultiTes Pro Navigating your thesaurus Importing data from text files |
| **Student's obligation (Special Requirements):** | http://www.multites.com/lessons.htm Getting Started with MultiTes Pro Navigating your thesaurus Importing data from text files |
| **Weekly Laboratory/Practice Plan:** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Hour** |               **Date**               | **Topics** |
| 1 | 2 | 13-17/12/2020 | The life and living things |
| 2 | 2 | 20-24/12/2020 | The animal Cell |
|  |  |  |  |
| 3 | 2 | 27-31/12/2020 | Classification |
| 4 | 2 | 3-7/1/2021 | Adaptation |
|  |  |  |  |
| 5 | 2 | 10-14/1/2021 | Ecosystems |
| 6 | 2 | 17-21/1/2021 | Groups of animals |
|  |  |  |  |
| 7 | 2 | 24-28/1/2021 | Midterm Exam |
| 8 | 2 | 31/1-4/2/2021 | Identification keys |
|  |  |  |  |
| 9 | 2 | 7-11/2/2021 | Darwin and evolution |
| 10 | 2 | 14-18/2/2021 | Invertebrates |
|  |  |  |  |
| 11 | 2 | 21-25/2/2021 | review |
| 12 | 2 | 28/2-4/3/2021 | final exam |
|  |  |  |  |
| 13 | 2 | 7-11/3/2021 | Final Exam |

 |
| **Course Book/Textbook:** | Adam, O. (2013). Zoology, taxt boob. WBC. 5th ed., 1543 pp. |
| **Other Course Materials/References:** | Roberts, j. (2009). Foundation of parasitology. 4th ed., WBC. London. 1455 pp. |
| **Teaching Methods (Forms of Teaching):** | Lectures, Practical Sessions, Excersises, Presentation, Seminar |
| **COURSE EVALUATION CRITERIA**

|  |  |  |
| --- | --- | --- |
| **Method** | **Quantity** | **Percentage (%)** |
| Participation | 1 | 5 |
| Quiz | 2 | 5 |
| Midterm Exam(s) | 1 | 20 |
| Laboratory | 1 | 10 |
| Lab/Practical Exam(s) | 1 | 15 |
| Final Exam | 1 | 40 |
| **Total** | **100** |
| **Examinations:**Essay Questions, True-False, Fill in the Blanks, Short Answers |  |  |

 |
| **Extra Notes:** |
| **ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activities** | **Quantity** | **Workload Hours for 1 quantity\*** | **Total Workload** |
| Theoretical Hours | 13 | 2 | 26 |
| Practical Hours | 13 | 2 | 13 |
| Final Exam | 1 | 12 | 12 |
| Participation | 1 | 10 | 10 |
| Quiz | 2 | 6 | 12 |
| Midterm Exam(s) | 1 | 8 | 8 |
| Laboratory | 1 | 10 | 10 |
| Lab/Practical Exam(s) | 1 | 9 | 9 |
| **Total Workload** | **100** |
| **ECTS Credit (Total workload/25)** | **4** |

 |

**Peer review**

|  |  |  |
| --- | --- | --- |
| Signature: | Signature: | Signature: |
| Name: | Name: | Name: |
| Lecturer                                                                       | Head of Department                                                         | Dean |

 |