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| **C:\Users\Omar Hirzallah\Documents\شعار%20الجامعة%20الهاشمية.jpg** | **Hashemite University**  **Faculty of Science**  **Course Syllabus** |  |

**Department of Biology & Biotechnology**

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| **Course Title**: General Biology (2) | **Course Number:** 110104102 |
| **Pre-requisite**: 110108105 | **Credit Hours**: 3 |
| **Designation**: : Compulsory | **Instructor**: Rajaa Abueideh |
| **Instructor's E-mail**: [raj@hu.edu.jo](mailto:raj@hu.edu.jo) | **Office Location:** Bio-103 &/or |
| **Internet Home Page:** staff.hu.edu.jo/rajaa | Herbarium Lab. at Herbarium building |
| **Office Hours**: 9 -10 Sunday, 9.30-10.30 Wednesday , 10-11 Thursday | |
| **Lecture Times:** 8-9 (Sunday,Tuesday,Thursday) Sec.1  11-12 (Sunday,Tuesday,Thursday) Sec.2 | |
| **Lecture Room:** Room 201مبنى الحسين الباني Sec.1  Room301 مبنى الحسين الباني Sec.2 | |

**Course Description :** This course emphasizes on theBasic principles of Animal Form and Function, Homeostasis, Metabolic Rate, Chemical Signals, Digestive Systems, Transport Systems, defenses against infection, Osmoregulation and Excretion, Reproductive systems, Electrical signals, Sensation and movement.

**Text Book**: Biology,by N. A. Campbell, J. B. Reece and others.11th edition, Pearson Education Limited Edinburgh, 2017

**References**:- Biolog**y**, by N. A. Campbell, J. B. Reece and others.10th edition,Pearson Educational Limited, Edinburgh, 2013

- Biology, by Sylvia S. Mader, 11thedition, Mc Graw Hill, 2013

- https://www.masteringbiology.com

**Major Topics Covered:**

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| **Topics** | **Chapter**  **In text** | **No. of Weeks** | **Contact Hours\*** |
| The Animal Body | 40 | 1.5 | 4.5. |
| Animal Digestive Systems | 42 | 1.5 | 4.5 |
| Animal Transport Systems | 43 | 2.5 | 7.5 |
| **Animal Defenses Against Infection** | 47 | 1.5 | 4.5 |
| Animal Excretory System | 44 | 1.5 | 4.5 |
| Chemical Signals in Animals | 41 | 2 | 6 |
| Animal Reproductive Systems | 45 | 2 | 6 |
| Electrical Signals in Animals | 48 | 1.5 | 4.5 |
| **Total** |  | **14** | **42** |

\*Contact Hours include lectures, quizzes and exams.

* **Specific Outcomes of Instruction (Course Learning Outcomes):**

After completing this course units, the students will be able to:

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|  | **Course Learning Outcomes (CLO)** | **(SO\*)** |
| **CLO1.** | Understand the hierarchy of animal structure by learning the basic features of animal tissues, and organs. | (a), (b), (c) |
| **CLO2.** | Differentiate between different animal tissues. | (a), (b) |
| **CLO3.** | Correlate the structure of particular types of tissues to their functions. | (a), (b) |
| **CLO4.** | Explain the structure and function of the major organ systems in animals (digestive, circulatory, respiratory, immune, excretory, reproductive, endocrine and nervous systems) | (a), (b), (d), (g) |
| **CLO5.** | Correlate the energy requirements of an animal to its size, activity, and environment. | (a), (d),(h) |
| **CLO6.** | Compare between Ectotherms and Endotherms based on metabolic rate. | (a), (h) |
| **CLO7.** | Understand the feedback control mechanisms in maintaining the internal environment in many animals. | (a), (d), (h) |
| **CLO8.** | Develop an understanding of comparative anatomy of animals. | (a), (b) |
| **CLO9.** | Explain the role of the nervous system and endocrine system in coordination between different body systems to maintain homeostasis. | (a), (g), (h) |
| **CLO10.** | Understand signaling in animals | (a), (g), (h) |

\***(SO)** = Student Outcomes Addressed by the Course.

* **Student Outcomes (SO) Addressed by the Course:**

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| **#** | **Outcomes Description** | **Contribution** |
| **Applied and Natural Sciences Student Outcomes** |
| (a) | A broad understanding of the major concepts in the biological sciences. | H |
| (b) | The ability to recognize the relationship between structure and function at all levels:  molecular, cellular, and organismal. | H |
| (c) | The technical and analytical skills to use biological instrumentation and proper laboratory techniques. | L |
| (d) | The ability to apply methods of scientific inquiry in biology. | M |
| (e) | An understanding of the role of science in society and the ethical conduct of science. | H |
| (f) | The ability to communicate effectively | M |
| (g) | A recognition of the need for, and an ability to engage in life-long learning | M |
| (h) | A knowledge of contemporary issues | H |
| **H**=High, **M**= Medium, **L**=Low | | |

**Grading Plan:**

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| First Exam: | 5th -6th week | 30 points | To be announced by the e-learning center |
| Second Exam: | 10th-11th week | 30 points | To be announced by the e-learning center |
| Final Exam: | 15th-16th week | 40 points | To be announced by the registrar |

**General Notes:(Attendance Policy)** students are expected to attend every class and arrive on time in compliance with HU regulations. In case you find yourself in a situation that prevents you from attending class or exam, you have to inform your instructor. If you miss more than 6 classes for the (Sunday, Tuesday, and Thursday model) or 4 classes for the (Monday and Wednesday Model), you cannot pass the course. Makeup excuses will be accepted only for very limited justified cases, such as illness and emergencies. Changing your section without informing your instructors is not accepted at all.