



The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	General Biology II
2	Course number	0304102
3	Credit hours (theory, practical)	3 credit hours Theory
	Contact hours (theory, practical)	3 hrs weekly
4	Prerequisites/co-requisites	None
5	Program title	B.Sc. in Biological Sciences and service course for many other programs
6	Program code	04
7	Awarding institution	University of Jordan
8	Faculty	Faculty of Science
9	Department	Department of Biological Sciences
10	Level of course	First year
11	Year of study and semester (s)	2016, first semester
12	Final Qualification	NA
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	2016, first semester

16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.
 Dr. Waleed Gharaibeh; 110 Biology; 11:00-12:00 Sunday, Monday, Wednesday; Ext. 22205; waleed.gharaibeh@ju.edu.jo

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.
 Dr. Said Damhoureyeh; 105 Biology; 9:30 – 11:00 Sun, Tue, Thu; ext. 22213; saidd@ju.edu.jo

18. Course Description:

As stated in the approved study plan.

General biology II surveys the diversity of living organisms, describes how they coordinate their responses to internal and external stimuli and explores their interactions in the biosphere. It describes the characteristics shared by prokaryotes, protists, fungi, plants and animals, and those that distinguish each taxonomic group and its subdivisions. It explores how the distribution patterns of biodiversity are ordered by abiotic factors such as the climate, by the biological properties of the organisms themselves and by ecological interactions between the taxa. The course further investigates the cellular basis and physiological principles underlying biological response, coordination and control by examining hormonal systems in plants and animals and nervous systems in animals. The comparison between plant hormone and animal endocrine systems demonstrates how different organisms can use different structures and signals to achieve the same basic homeostatic regulatory functions.

19. Course aims and outcomes:**A- Aims:**

This course has two major aims: i) to provide an introduction to biological diversity within evolutionary and ecological contexts and ii) to introduce the anatomical basis and physiological functions of major plant and animal control systems.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...

By the completion of this course, students will be able to:

1. Describe the diversity and evolutionary adaptations of prokaryotes, protists, fungi, plants, invertebrates and vertebrates and outline their ecological impacts and relevance to the well being of humans.
2. Explain the relationship between taxonomy and evolutionary history.
3. Illustrate using examples the complexity of biological systems and the necessity for biologists to study them at different levels of organization; from macromolecules to ecosystems.
4. Demonstrate the continuity of heritable information across generations using the sexual and asexual life cycles of living organisms belonging to different taxonomic groups.
5. Characterize the general feature of terrestrial biomes and the dynamic nature of ecological interactions within them.
6. Describe the general biogeographic patterns and the biotic and abiotic factors the influence them.
7. Outline the basic cellular and physiological regulatory mechanisms and exemplify their role in maintaining homeostasis using cases from plants and animals.
8. Describe the correlation between biological structure and function, and illustrate that relationship using concrete examples from plant and animal control systems.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction and Orientation Cellular Signaling	1	Drs. Gharaibeh and Damhoureyeh	1, 3, 7, 8	First, Midterm and Final Exams	Reece, JB <i>Et Al.</i> 2015. Campbell Biology, 10 th Edition
Plant Signals and Behavior	2	Drs. Gharaibeh and Damhoureyeh	3, 7, 8	First, Midterm and Final Exams	Reece, JB <i>Et Al.</i> 2015. Campbell Biology, 10 th Edition
Chemical Signals in Animals Electrical Signals In Animals	3 4	Drs. Gharaibeh and Damhoureyeh	3, 7, 8	First, Midterm and Final Exams	Reece, JB <i>Et Al.</i> 2015. Campbell Biology, 10 th Edition
Neural Regulation In Animals	5 6	Drs. Gharaibeh and Damhoureyeh	3, 7, 8	First, Midterm and Final Exams	Reece, JB <i>Et Al.</i> 2015. Campbell Biology, 10 th Edition
Prokaryotes, The Origin and Evolution of Eukaryotes, Introduction to fungi, Nonvascular and Seedless Vascular Plants, Seed Plants, An Introduction to Animal Diversity, Invertebrates, Vertebrates, Ecology	7 8 9 10 11 12 13 14	Drs. Gharaibeh and Damhoureyeh	2, 4, 5, 6	First, Midterm and Final Exams	Reece, JB <i>Et Al.</i> 2015. Campbell Biology, 10 th Edition

21. Teaching Methods and Assignments:

<p>Development of ILOs is promoted through the following <u>teaching and learning methods</u>:</p> <p>Lecturing and discussions throughout the semester</p> <p>PowerPoint presentation and movies</p> <p>Office Hours</p>

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

The grade is distributed over 3 on-campus online multiple-choice exams as detailed in the table below.

Description	Weight
<i>First hour exam</i>	<i>20%</i>
<i>Second hour exam</i>	<i>30%</i>
<i>Final exam</i>	<i>50%</i>

23. Course Policies:

A- Attendance policies:

Enrolled students are expected to attend the lectures in line with the university of Jordan policy as outlined in your student handbook.

B- Absences from exams:

You should talk to your instructor as soon as possible if you miss an exam. All such cases will be dealt with according to the rules outlined in your student handbook.

C- Health and safety procedures:

NA

D- Honesty policy regarding cheating, plagiarism, misbehavior:

All violations pertaining to cheating, plagiarism, misbehavior will be dealt with in accordance to the rules outlined in your student handbook.

E- Grading policy:

All exams are made up of MCQ's and will be graded automatically.

F- Available university services that support achievement in the course:

The class Moodle page curated by UJ Elearning.

24. Required equipment:

None

25. References:

A- Required book (s), assigned reading and audio-visuals:

Unused copies of the textbook's international edition are bundled with free access to mastering biology, an online tutorial and assessment system.

B- Recommended books, materials, and media:

<http://www.masteringbiology.com>,

26. Additional information:

None

Name of Course Coordinator: الدكتور وليد غرايبة Signature: ----- Date: 12/ 01/ 2016

Head of curriculum committee/Department: الاستاذة الدكتورة سوسن العوران Signature: -----

Head of Department: الدكتورة هناء العيوس Signature: -----

Head of curriculum committee/Faculty: الاستاذة الدكتورة أمل العابودي Signature: -----

Dean: الاستاذ الدكتور صالح محمود Signature: -----

Copy to:

Head of Department
Assistant Dean for Quality Assurance
Course File