



**The University of Jordan**

**Accreditation & Quality Assurance Center**

**COURSE Syllabus**

1	Course title	Ecology
2	Course number	0334471
3	Credit hours (theory, practical)	3 credit hours (2 Theory + 1 Practical)
	Contact hours (theory, practical)	2 hrs weekly Theoretical + 3 practical
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	Fourth year
11	Year of study and semester (s)	2016/ 2017, second 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	9/ 04/ 2017

#### 16. Course Coordinator:

*Office numbers, office hours, phone numbers, and email addresses should be listed.*

Dr. Said Damhoureyeh; 105 Biology ; Sun 11 – 12, Mon 1 – 2, Wed 1 - 2 ext. 22213; saidd@ju.edu.jo

#### 17. Other instructors:

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#### 18. Course Description:

*As stated in the approved study plan.*

This course focuses on the basic concepts in ecology; organization, structure and function of ecosystem and ecosystem properties; cycling of matter and flow of energy in ecosystems and their equilibrium; factors involved in the regulation, growth, and general dynamics of populations; data needed to describe populations, population growth, population models, and regulatory mechanisms; spatial and temporal variation and properties of populations; community structure and interactions; succession patterns in aquatic and terrestrial communities.

**19. Course aims and outcomes:**

<p><b>A- Aims:</b></p> <p>1- Introduce the term Ecology and Environment</p> <p>2- Understand the principals of Ecology as they relate to the interactions of organisms and the surroundings focusing on the concept of ecosystem.</p> <p>3- Introduce the students to the key concept and major issues surrounding organismal ecology at the three levels ecological hierarchy (individual, population, and community).</p> <p><b>B- Intended Learning Outcomes (ILOs):</b> Upon successful completion of this course students will be able to ...</p>
By the completion of this course, students will be able to:
1. Get the knowledge of examples and basic theoretical ideas surrounding the ecosystem, community and population dynamics and understanding of simple emergent patterns in population, community and ecosystem structure
2. To infer the importance of environment and how we may preserve its component, and focus on the importance of preserving diversity as a source of genetic heritage.
3. Realize the impact of organisms on the structure and function of our ecosystems and the delicate balance they really maintain
4. Understand communities and patterns of succession and the dynamics of communities
5. be a researcher and learn different sampling techniques, work in the field of ecology and appreciate the environment and get to know the ecology of Jordan

**20. Topic Outline and Schedule:**

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction and Orientation Definition	1	Dr Damhoureyeh	1,	First, Midterm and Final Exams	Ecology and Field Biology, 6th ed., By Smith and Smith, 2001
Ecosystem structure and function , biotic and abiotic factors, stability of ecosystems, flow of energy and biogeochemical cycles	2 - 6	Dr. Damhoureyeh	1, 2, 5	First, Midterm and Final Exams	Ecology and Field Biology, 6th ed., By Smith and Smith, 2001
Population Dynamics , definitions and structure, properties and calculations	7 - 11	Dr. Damhoureyeh	1, 3, 5	First, Midterm and Final Exams	Ecology and Field Biology, 6th ed., By Smith and Smith, 2001
Community structure and function, calculations of biodiversity variables. Succession, types and theories	12 - 14	Dr. Damhoureyeh	1,2, 4, 5	First, Midterm and Final Exams	Ecology and Field Biology, 6th ed., By Smith and Smith, 2001
Know the ecology of Jordan and field trips	3 trips throughout the semester	Dr. Damhoureyeh	1, 2, 3, 4, 5	Reports and final presentation on	Ecology and Field Biology, 6th ed., By

				the practical part	Smith and Smith, 2001 and the Field manual
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## 21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Lecturing and discussions throughout the semester

Field trips to different parts of Jordan

Laboratory techniques

Office Hours

## 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 2 exams trip reports and final lab presentation as detailed in the table below.*

<b>Description</b>	<b>Weight</b>	<b>Date</b>
<i>Mid-term exam</i>	<i>30%</i>	<i>TBA</i>
<i>Field trip reports</i>	<i>20%</i>	<i>After each trip</i>
<i>Final lab presentation</i>	<i>15%</i>	<i>TBA</i>
<i>Final Exam</i>	<i>35%</i>	<i>TBA</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, fill in the blanks and subjective.**

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

**The class Moodle page curated by UJ Elearning.**

**24. Required equipment:**

**Laboratory glass ware and chemical, robes and quadrat sticks, transportation for the field trips**

**25. References:**

A- Required book (s), assigned reading and audio-visuals:  
Ecology and Field Biology, 6th ed., By Smith and Smith, 2001

B- Recommended books, materials, and media:

**Theory**

- 1) Essential of Ecology, Townsend, Harper and Begon, 2000.
- 2) Ecology, Dodson et al., 1998.
- 3) Basic Ecology, By Odum, 1983.

**Practical Part**

- 1) Vegetation of Jordan, by Dr. D. Al-Eisawi. The paper will be supplied with the lab manual
- 2) Jordan country study on biological diversity, by General Corporation for the Environment Protection (GCEP). 1998..... (at MoE)

**26. Additional information:**

None

Name of Course Coordinator: **Dr Said Damhoureyeh** Signature: ----- Date: **7/ 04/ 2017**Head of curriculum committee/Department: **Dr Hanaa Alebous** Signature: -----Head of Department: **Dr Hana Alebous** Signature: -----

Head of curriculum committee/Faculty: Signature: -----

Dean: **Dr Shaher Momani** Signature: -----Copy to:

Head of Department  
 Assistant Dean for Quality Assurance  
 Course File