



مركز الاعتماد  
وإضمان الجودة  
ACCREDITATION & QUALITY ASSURANCE CENTER



**The University of Jordan**

**Accreditation & Quality Assurance Center**

**COURSE Syllabus**

**Course Name:**  
**ENVIRONMENTAL SCIENCE**

1	Course title	ENVIRONMENTAL SCIENCE
2	Course number	0305100
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	Credit Hours
4	Prerequisites/corequisites	-
5	Program title	University Requirement
6	Program code	
7	Awarding institution	
8	Faculty	Science
9	Department	Geology
10	Level of course	All Years
11	Year of study and semester (s)	
12	Final Qualification	
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	2016/17

#### 16. Course Coordinator:

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

Instructor: Prof. Dr. Hani N. Khoury (Office: GEO 203), Phone: 5355000/2346;

Khouryhn@ju.edu.jo

<http://eacademic.ju.edu.jo/khouryhn/default.aspx>

Office Hours: Daily 12-14

#### 17. Other instructors:

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

*Prof. Dr. Fathi Shaqour; Dr. Khitam Al-zghoul*

#### 18. Course Description:

As stated in the approved study plan:

This course introduces the student to the rudiments of environmental science whose corner stone was laid in the second half of the 20th century. This is being accomplished by discussing the following topics: Earth and natural hazards; Ecosystems; Biogeochemical Cycles; Man and the Environment and the Natural Resources in the Solid Earth System; Air Pollution; Water Resources, management and Pollution; Solid Waste; Food and Health; Environmental Impact Assessment.

## 19. Course aims and outcomes:

### A- Aims:

The study of environmental sciences is necessary to become more cognizant of the living world, the biotic and abiotic factors, which affect your daily life, and the interrelationships you have with other organisms. Material covered in the class includes global interactions, ecosystems, energy and matter, land, water, atmosphere, and biodiversity.

Lecture, class discussions, presentations, will all be used throughout the year to aid your learning of the major ecological and biological concepts.

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

Environmental Science is the most inclusive of all sciences. It crosses the lines among science disciplines as well as having applications in the economic, political, geographical, and sociological areas. It is global in scope. This course addresses the general education outcomes relating to identifying and evaluating global, economic, political, historical, and geographical forces, and analysing how these forces help shape the past, present, and future.

## 20. Topic Outline and Schedule:

Course Content	No of Lectures
Basic Issues in Environmental Science	2
Thinking Critically about the Environment	2
Systems and Change	2
The Biogeochemical Cycle	3
Human Population as an Environmental	2
Problem Ecosystems and Ecosystem Management	2
Biological Diversity	1
Biogeography	1
Biological Productivity and Energy Flow	1
Ecological Restoration	2
First Hourly Exam 20%	1
World Food Supply	1
Effects of Agriculture on the Environment	1
Forests, Parks, and Landscapes	1
Wildlife, Fisheries, and Endangered Species	1
Environmental Health, Pollution, and Toxicology	2
Energy: Some Basics	1
Fossil Fuels and the Environment	2
Alternative Energy and the Environment	2
Second Hourly Exam 30%	1
Nuclear Energy and the Environment	2
Water Supply, Use, and Management	2
Water Pollution and Treatment	1
Atmosphere, Climate, and Global Warming	2
Air Pollution	2
Indoor Air Pollution	1
Ozone Depletion	1
Waste Management	2
Review	2

### 21. Teaching Methods and Assignments:

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

Black board, power point presentations, handout

### 22. Evaluation Methods and Course Requirements:

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

Exams only

### 23. Course Policies:

A- Attendance policies: controlled for all lectures

B- Absences from exams and handing in assignments on time: controlled and accepted absence allows make up exam.

C- Health and safety procedures: Department responsibility

D- Honesty policy regarding cheating, plagiarism, misbehavior: Controlled according to the university regulations

E- Grading policy:

Exam #1:	30%
Midterm Exam #2:	30%
Final Exam:	40%
Total:	100%

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

### 24. Required equipment:

-

**25. References:**

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

Textbook –Daniel Botkin, and Edward Keller. Last edition. *Environmental Science: Earth as a Living Planet*, 8<sup>th</sup> Ed. Wiley & Sons, Inc.; New York, NY.

B- Recommended books, materials, and media:

Arms, Karen. 2000. *Environmental Science*. Holt, Rinehart, & Winston; Austin, TX.

Botkin, Daniel and Edward Keller. 2000. *Environmental Science: Earth as a Living Planet*, 3<sup>rd</sup> Ed. Wiley & Sons, Inc.; New York, NY.

Cunningham, William and Barbara Woodworth Saigo. 2000. *Environmental Science: A Global Concern*, 6<sup>th</sup> Ed. McGraw-Hill; New York, NY.

Enger, Eldon and Bradley Smith. 2000. *Environmental Science: A Study of Interrelationships*, 7<sup>th</sup> Ed. McGraw-Hill; New York, NY.

Miller, G. Tyler. 2003. *Environmental Science: Working with the Earth*, 9<sup>th</sup> Ed. Brooks-Cole; Pacific Grove, CA.

**26. Additional information:**

Name of Course Coordinator: -----Signature: ----- Date: -----

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

-----

Head of Department: ----- Signature: -----

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

-

Dean: ----- Signature: -----

Assurance

Copy to:  
Head of Department  
Assistant Dean for Quality

Course File