

The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	Coastal Ecology and Marine Ecosystems
2	Course number	5502202
3	Credit hours (theory, practical)	3 hours
	Contact hours (theory, practical)	
4	Prerequisites/corequisites	5501102 or Concurrently
5	Program title	Bachelor in Coastal Environment
6	Program code	5501
7	Awarding institution	The University of Jordan-Aqaba
8	Faculty	Marine Sciences
9	Department	Coastal Environment
10	Level of course	Second year
11	Year of study and semester (s)	First semester 2014/2015
12	Final Qualification	BSc.
13	Other department (s) involved in teaching the course	non
14	Language of Instruction	English
15	Date of production/revision	2011

16. Course Coordinator:

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

Prof. Maroof A. Khalaf, Tel. 03-2090450-35073 Office hours; e-mail; m.khalaf@ju.edu.jo

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed. Prof. Maroof A. Khalaf, Tel. 03-2090450-35073 Office hours; e-mail; m.khalaf@ju.edu.jo

18. Course Description:

As stated in the approved study plan.

Introduction to aquatic systems to include estuaries, mangroves, coral reefs, seagrass beds, lagoons, beaches, intertidal zones and tidal flats. The course will introduce also the interaction between marine and terrestrial environment systems for ecological and socio-economic objectives. It will provide information on the different marine ecosystems and their integrated

role with the entire marine environment. The course will provide snapshots and brief description about global change to include paleo-reconstruction of past lagoon environments, fossil coral reefs, dune systems and land use.

19. Course aims and outcomes:

- The course will provide the students with information on aquatic systems which include estuaries, mangroves, coral reefs, seagrass beds, lagoons, beaches, intertidal zones and tidal flats.
- The course will introduce also the interaction between marine and terrestrial environment systems for ecological and socio-economic objectives
- It will provide information on the different marine ecosystems and their integrated role with the entire marine environment.

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

Learning outcomes:

Knowledge and understanding

At the end of this module, students will be able to:

- Know the scope of ecology and interaction between organisms and the environment affect the distribution of species, aaquatic and terrestrial biomes.
- Know the basic principles of Community Ecology, Interspecific Interactions and Community Structure.
- Know Ecosystems: primary production in ecosystems and secondary production in Ecosystems
- Know what are intertidal communities, coral reef communities, continental shelves and neritic zone, the open sea, and life in the ocean's depths.

• Cognitive skills (thinking and analysis).

- The thinking skills will be developed by encouraging students to conclude answers to different questions that the instructor intends to use during the presentation of the scientific material.

• The instructor intends to stimulate the student's analytical thinking side via connections with general aspects in daily life or through questions, net searching, and home works.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
1. An Introduction to Ecology and the Biosphere: The scope of Ecology, Interaction between organisms and the Environment Affect the distribution of Species, Aquatic and Terrestrial biomes	1			Quiz	
Community Ecology: Interspecific Interactions and Community Structure, Disturbance and Community Structure, Biogeographic Factors Affect Community Biodiversity.	2-3			Quiz	
Ecosystems: Ecosystems, Energy, and Matter, Primary Production in Ecosystems, Secondary Production in Ecosystems	4			Quiz	
Intertidal Communities: Rocky Shores, Sandy Shores	5-7			Quiz	
Coral Reef Communities:	8-10				

Organisms That Build Coral Reefs, Coral Reef Ecology.				
Continental Shelves and Neritic Zone: Continental Shelves, Benthic Communities, Neritic Zone	11-12			
The Open Sea: Regions of the Open Sea, Life in the Open Sea, Survival in the Open Sea	13-14			
Life in The Ocean`s Depths: Survival in the Deep Sea, Life in the Dark, Giants of the Deep	15-16			

21. Teaching Methods and Assignments:

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

Power point lectures, questions and discussions, videos, home works, lab work Assignments such as preparing of reports on topics related to the subject. Students are requested to present a power point presentation on a subject of his/her choice within the framework of the study material.

22. Evaluation Methods and Course Requirements:

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

- 1. Quizzes
- 2. Power point presentations
- 3. Home work
- 4. Lab work
- 5. Participation in the class
- 6. Mid Exam
- 7. Final Exam

23. Course Policies:

A- Attendance policies: I strongly recommend you attend every lecture. Missing any class will put you at a distinct disadvantage when test taken. 2- Any student with six or more unexcused absences from lecture sessions can be

legally dropped from the course.

B- Absences from exams and handing in assignments on time: The only valid excuses for missing an exam are: death in the family, illness, or accident. In this case you must provide evidence of some kind and you must report me within 3 days.

C- Health and safety procedures: Students who miss the exam due to illness or other excuse must notify me within the first week after the exam, so make up arrangements can be Made.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

- 1. Students are not expected to talk in class while the instructor is lecturing
- 2. After two warning of taking or any other classroom disruption, the Student will be automatically removed from the class.
- 3. Any act of cheating, or academic misconduct is subject to penalties.
- 4. The minimum penalty for any students caught cheating will receive a zero on that test.

E- Grading policy: I will base your grade on your performance in the exams and classroom

Туре	Grading
Quizzes, Scientific reports and participation	20%
Midterm exam:	30%
Final Exam:	50%

Exams: The examinations will consist of any combination of Multiple choice, short answer, fill in the blank, matching, identification of figures or essay questions

F- Available university services that support achievement in the course: Books in the library, data show, printers, scanners

Mid Term 30%, Reports, research projects, Home works, presentations 15%, Quizzes. 10%, Final Exam 50%

Available university services that support achievement in the course:

Library sources are available, internet, laboratory facilities

24. Required equipment:

l. Lab top	
2. Data how	
3. white board	
4. Printer	
5. scanner	
5. markers	

25. References:

A- Required book (s), assigned reading and audio-visuals: **Textbook: Textbooks**Biology, 2008. Campbell And Reece. Seventh Edition Benjamin and Coming Publisher.

Karleskint, G; Turner, R and Small, JW. 2008. Introduction to Marine Biology. Third edition, pp. 581

B- Recommended books, materials, and media: Internet access, videos

26. Additional information:

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

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

<u>Copy to:</u> Head of Department Assistant Dean for Quality Assurance Course File