The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	Marine Vertebrates
2	Course number	5501252
3	Credit hours (theory, practical)	2 theory +1 practical
	Contact hours (theory, practical)	
4	Prerequisites/corequisites	5501102
5	Program title	Bachelor in Marine Biology
6	Program code	5501
7	Awarding institution	The University of Jordan-Aqaba
8	Faculty	Marine Sciences
9	Department	Marine Biology
10	Level of course	Second year
11	Year of study and semester (s)	Second 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.

The course introduces students to systematic, morphology, ecology and biology of marine vertebrates (i.e. fishes, sea turtles, marine birds, and marine mammals). The course will include one credit hour of laboratory work which will concentrate on the structure, function and

habits of marine vertebrates and the ecological interactions of these animals with their biotic and abiotic surroundings.

19. Course aims and outcomes:

- The course will provide the students with information on systematic, morphology and ecology of marine fishes, marine turtles including marine birds and marine mammals.
- The course will provide the students with the basic understanding of the biology of marine fishes, marine turtles including marine birds and marine mammals.
- The topics covered in this course will allow the students to better comprehend other courses related to marine organisms.

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 what is major groups of fishes such as jawless fishes, cartilaginous fishes**,** lobefins, and ray-finned fishes.
- Know the biology of Fishes: body shape, fish colouration and patterning, locomotion, respiration and osmoregulation, cardiovascular system, buoyancy regulation, nervous system and senses, digestion, reproduction, schooling and migration.
- Know ecology and biology of marine reptiles and birds: Extinct marine reptiles, marine crocodiles, sea turtles, marine iguana, sea snakes,
- Know scientific information's on seabirds: adaptation for flight, shorebirds, gulls and their relatives, pelicans and their relatives and Penguin's.
- Know the biology and ecology of marine mammals: characteristics of marine mammals, sea otters, polar bears, pinnipeds: seals, sea lions, and walruses, sirens: manatees and dugongs, cetaceans: whales and their relatives.
- **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. **Marine Fishes:** body shape, fish colouration and patterning, locomotion, respiration and osmoregulation, cardiovascular system, buoyancy regulation, nervous system and senses, digestion, reproduction, schooling and migration.	1-4			Quiz	
Marine Reptiles and Birds: Extinct marine reptiles, marine crocodiles, sea turtles, marine iguana, sea snakes,	5-8			Quiz	
Seabirds: adaptation for flight, shorebirds, gulls and their relatives, pelicans and their relatives and Penguin's.	9-12			Quiz	
Marine mammals: characteristics of marine mammals, sea otters, polar bears, pinnipeds: seals, sea lions, and walruses, sirens:	13-16			Quiz	

manatees and dugongs, cetaceans: whales and their relatives.					

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 assessment methods and requirements:

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

Type	**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:

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

25. References:

A- Required book (s), assigned reading and audio-visuals:
Textbook: All required readings are in the 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:

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

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

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

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

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

Copy to:
Head of Department
Assistant Dean for Quality Assurance
Course File