The University of Jordan/Aqaba

Faculty of Marine Sciences

Department of Marine Biology

Second Semester, 2015/2016

Course Syllabus **-5503352**

Course Title: Vertebrate Anatomy	**Course Code: -5503352**
Course Level:	**Third year Course prerequisite (S) and/ or co-requisite (S):**
Lecture Time: 12.30 – 2.00	**Credit hours: 3**

Academic Staff Specifics				
Name	**Rank**	**Office No.**	**Office Hours**	**E-mail Address**
Dr. Maroof A. Khalaf	**Professor**		**10.00 – 11.00**	**m.khalaf@ju.edu.jo**

Course module objectives:

- The course will provide the students with the basic understanding of the vertebrate anatomy starting with chordate phylogeny, chordate characteristics, chordate body plan, Protochordata (Hemichordata, *Enteropneusta* and *Pterobranchia),* Cephalochordata, Urochordata, *Ascidiacea—"Sea Squirts", Larvacea (Appendicularia)* and *Thaliacea,* Agnathans, Gnathostomes, Agnathans, Gnathostomes: placoderms, Chondrichthyes: Chimaeras (or ratfishes), Teleostomi: Osteichthyes, Tetrapods: Ancient tetrapods, Modern Amphibians (frogs, salamanders, and caecilians), Reptilia: *(*Parareptilia, Eureptilia), Tetrapods: (, Amphibians, reptiles and mammals).
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Course module components

Title:

Text book I. Vertebrates: Comparative anatomy, function and evolution. 2012

Author(s): Kenneth V. Kardong, Ph.D.
Washington State University

Publisher: Published by McGraw-Hill

ISBN 978–0–07–352423–8

Text Book II. Elements of Chordate Anatomy 1967

Charles K. Weichert

McGraw-Hill Book Company

1- Support material (s): homework, video clips

Teaching methods:

- Lectures, discussion groups, tutorial, problem solving, debates, ….etc.
- The use of power Point presentations, Illustrations with modules, educational animations, and movies.

Learning outcomes:

- **Knowledge and understanding**
  At the end of this module, students will be able to:

- Know what is Vertebrates anatomy starting with chordate phylogeny, chordate characteristics, chordate body plan, Protochordata (Hemichordata, *Enteropneusta* and *Pterobranchia),* Cephalochordata, Urochordata, *Ascidiacea—"Sea Squirts", Larvacea (Appendicularia)* and *Thaliacea,* Agnathans, Gnathostomes, Agnathans, Gnathostomes: placoderms, Chondrichthyes: Chimaeras (or ratfishes), Teleostomi: Osteichthyes, Tetrapods: Ancient tetrapods, Modern Amphibians (frogs, salamanders, and caecilians), Reptilia: *(*Parareptilia, Eureptilia), Tetrapods: (, Amphibians, reptiles and mammals). Mammalia *(*monotremes (platypus and spiny anteaters) and the Theria, made of metatherians (pouched marsupials such as kangaroos and opossums) and eutherians (placental mammals).
- Vertebrate anatomy will focus on comparative anatomy of various vertebrate systems such as digestive system, respiratory system, reproductive and cardiovascular systems and Excretory systems.
- The topics covered in this course will allow the students to better comprehend other courses related to zoology and biochemistry courses.

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 intend to stimulate the student`s analytical thinking side via connections with general aspects in daily life or through questions, net searching, and home works.

Allocation of Marks

Assessment Instruments	Mark
Mid Term examination	30%
Report, research projects, home works	10%
Quizzes	10%
Final Examination	50%
Total	100%

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Expected workload:
On average students need to spend 2 hours of study and preparations for each 50-minutes lecture.

Attendance Policy:
Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean, the student shall be considered to have withdrawn from the course.