

AMERICAN UNIVERSITY OF BEIRUT

Faculty of Arts & Sciences

Department of Biology

ENTOMOLOGY

**Syllabus
Spring 2010-2011**

Course number: Biology 286

Number of credits: 4

Meeting time and location: 12 M, W, F in Biology 004.

Instructor:

Name: Khouzama Knio, PhD

Office: Room 215, Biology Bldg.

Office hours: M, F. 10:30-11:30 am

Tel.: x 3886

Email: kknio@aub.edu.lb

Course objectives:

To introduce students to the fascinating world of insects, the most numerous and diverse animal species on Earth! To study insect morphology and physiology and see how form relates to function. To become familiar with the major groups of insects, and discover their behaviour, life styles, and ecology.

Learning objectives:

- knowledge of entomological terms
- study insect anatomy and physiology
- understanding the evolution and diversity of insects
- identifying the major orders and families of insects
- learning how to make an insect collection
- learning about insect behaviour and life histories
- getting rid of the fear of insects
- appreciate the importance, value, and role of different insect species.

Course outline:

A. Introduction:

Insects, their importance, success, distribution, and diversity.

B. Arthropods and insect evolution:

Phylum Arthropoda – characteristics of arthropods

Class Insecta – insects in relation to other arthropods

- characteristics of insects.

C. Anatomy, physiology, and development of insects:

1. the body wall
2. head, thorax, and abdomen
3. digestive system
4. nutrition
5. nervous system and sensory receptors
6. circulatory system
7. respiratory system
8. water-ion balance and excretory system

9. reproductive system
10. development and metamorphosis
11. photoperiodism and diapause
12. endocrine system

D. Major orders of insects: biology, ecology, and behavior:

1. Entognathous insects: Collembola, (Protrura, Diplura)
2. Apterous: Microcoryphia, Thysanura
3. Pterygota: Ephemeroptera, Odonata
4. Grylloblattaria, Phasmida, Orthoptera, Mantodea, Blattaria
5. Isoptera, Dermaptera
6. Phthiraptera
7. Hemiptera
8. Homoptera
9. Thysanoptera, Neuroptera
10. Coleoptera
11. (Strepsiptera, Mecoptera), Siphonaptera
12. Diptera
13. (Trichoptera)
14. Lepidoptera
15. Hymenoptera

Grading system:

	% of final grade	date
quiz I	20%	Mond March 21 at 12 (noon)
quiz II	20%	Mond. April 18 at 12 (noon)
lab.	25%	
final	35%	

Policies:

Students are required to take all exams at the scheduled time and date.

No make-up exams will be given (unless you have a valid medical excuse from the infirmary).

Class attendance is highly recommended. Absence of a student does not exempt him/her from the responsibility of the work done or from any announcements made during the missed session.

Attendance of all lab sessions is obligatory. You cannot attend a lab section other than yours.

