

The Hebrew University of Jerusalem

Syllabus

THE ZOOGEOGRAPHY OF VERTEBRATES IN ISRAEL - 71838

Last update 22-03-2015

<u>HU Credits:</u> 3

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: animal sciences

<u>Academic year:</u> 3

Semester: 2nd Semester

Teaching Languages: Hebrew

<u>Campus:</u> Rehovot

Course/Module Coordinator: Dr. Gila Kahila

Coordinator Email: gila.kahila@mail.huji.ac.il

Coordinator Office Hours: By Appointment

<u>Teaching Staff:</u> Dr. Gila Kahila

Course/Module description:

Biogeography is a field of study that deals with the study of distribution of various organisms in the world. Biogeography branch of science is a field of study that combines zoogeography many fields such as ecology, evolutionary biology, ecology, botany, geology and physical geography. The course will review animal dispersal models and mechanisms responsible for this. We will review the biological and ecological principles responsible for the spread of the animals. Particular focus on processes related to the history of fauna in the southern Levant in general and Israel in particular. Devote attention to changes resulting from human activity and examine the implications for the future distribution of animals in

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the region

Course/Module aims:

Acquisition of scientific tools for understanding the processes that affect the distribution of organisms on Earth and in Israel in particular.

Learning outcomes - On successful completion of this module, students should be able to:

Describe climatic processes that changed organism distribution Describe animal distribution Conclude on processes that evolve from man behavior

Try to prevent extinctions

<u>Attendance requirements(%):</u> 100

Teaching arrangement and method of instruction: Frontal lecture and trip

Course/Module Content:

1 . The biogeographic history of the earth - a general introduction and overview of geologic history . The biogeography of the Middle East while noting key sites in Israel and Fossil Show .

2. Paleo - Pleistocene - Holocene in Israel, the structure of the fauna in the country.

3. Climate Change - glaciers, endemic species.

4. Principles of taxonomy - definition of species, morphological taxonomy and

molecular taxonomy front .

- 5. Specification typical barriers distribution patterns.
- 6. Size does / does not matter in islands and land ; biogeography of islands .
- 7 . Study Tour
- 8 . Extinctions and their implications .
- 9. Distribution patterns and biogeographic area What factors are affecting
- 10. Variety of species , invasive species
- 11 . Biogaography of Middle East Nature Conservation re-introduction
- 12. Domestication
- 13. Evolution of man.

Required Reading:

Additional Reading Material:

<u>Course/Module evaluation:</u> End of year written/oral examination 0 % Presentation 0 % Participation in Tutorials 0 % Project work 90 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 0 % Other 10 %

Additional information: