

Biology of Vertebrates. 2018

Introduction to the course

The number of vertebrate species is far fewer than that of arthropods or molluscs, but vertebrates are the most conspicuous animal group on Earth. They inhabit all types of ecosystems and performs function (locomotion, feeding, reproduction et al) in a variety of ways. This course introduces the diversity and the ways of life in vertebrate animals and emphasize principles in understanding this diversity.

weekly schedule

date	topics
27 Feb	introduction
06 Mar	classification, phylogeny, synapomorphy I
13 Mar	classification, phylogeny, synapomorphy II
20 Mar	geology, paleoecology, paleoclimates, diversity, evolution
27 Mar	modifications, body size, age, complexity
03 Apr	(no class) visit National Museum of Natural Sciences
10 Apr	senses: vision, hearing, smell, other senses
17 Apr	needs: food, water, temperature, air, sex
24 Apr	defense and offense 1: skin, immunity, structure, poison
01 May	defense and offense 2: locomotion, body size, group size, age
08 May	living in aquatic environments 1
15 May	living in aquatic environments 2
22 May	living in terrestrial environments 1
29 May	living in terrestrial environments 2
05 Jun	vertebrates of Taiwan
12 Jun	Researches on vertebrates of Taiwan, 1
19 Jun	Researches on vertebrates of Taiwan, 2
26 Jun	final words and final report due

Course requirements

1. weekly questions and answers on the net (40 %)
2. one final written report (60 %)

Suggested Readings:

Linzey D. 2011. Vertebrate Biology. Johns Hopkins University Press.

Pough FH, CM Janis, JB Heiser. 2012. Vertebrate Life. (9th ed.) Pearson.

Websites:

Animal Diversity Web: <https://animaldiversity.org>

IUCN: <https://www.iucn.org>

Tree of Life Project: <http://tolweb.org/tree/>

VERTNET: <http://www.vertnet.org/about/about.html>