



UNIVERSITÀ DI PAVIA

Anno Accademico 2021/2022

ZOOLOGY (SURNAMES A-K)

Enrollment year	2021/2022
Academic year	2021/2022
Regulations	DM270
Academic discipline	BIO/05 (ZOOLOGY)
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	BIOLOGICAL SCIENCES
Curriculum	PERCORSO COMUNE
Year of study	1°
Period	(01/03/2022 - 14/06/2022)
ECTS	9
Lesson hours	72 lesson hours
Language	Italian
Activity type	WRITTEN AND ORAL TEST
Teacher	BONIZZONI MARIANGELA - 6 ECTS GASPERI GIULIANO - 3 ECTS
Prerequisites	Basic knowledge of biology (cytology, physiology, genetics, etc.).
Learning outcomes	Learn the characteristics of animal organisms, in particular invertebrates. Understand the origin of the diversity of organisms and be able to recognize the processes (adaptation, contingency) that have shaped their evolutionary history.
Course contents	Conceptual bases, methods and fields of study of Zoology. Concepts of phylogeny-ontogeny, homology, apomorphy, plesiomorphy, convergence, parallelism, adaptations; relationship between form and function; short history of the theory of evolution; evolutionary processes and mechanisms; bases of phylogenetics; biogeography. Functions: protection, support and movement; nutrition; circulation and respiration; excretion and osmoregulation; immunity; nervous system;

reproduction.

Structural plan (Bauplan) of the main phyla of Protozoans and Metazoans (Porifers, Cnidarians, Platelinths, Aschelminths, Molluscs, Anellids, Arthropods, Echinoderms), focusing on their evolutionary and phylogenetic relations.

Teaching methods

Lectures and seminar discussion

Reccomended or required readings

Any zoological textbook is fine.

Suggested books:

- Zoologia (di Casiraghi, De Equilor, Cerrano), UTET Università (in Italian)

- Invertebrates (di Brusca, Moore, Shuster), OUP USA (3rd edition, in English)

Assessment methods

Written exam (multiple choices and open questions) with a duration of 2 hours.

Further information

Written exam (multiple choices and open questions) with a duration of 2 hours.

Sustainable development goals - Agenda 2030

[The goals](#)