UNIVERSITÀ DI PAVIA

## Anno Accademico 2021/2022

# ZOOLOGY (SURNAMES L-Z)

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| **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** | OMETTO LINO - 9 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 that have shaped their evolutionary history. |
| **Course contents** | Conceptual bases, methods and fields of study of Zoology.<br>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.<br>Functions: protection, support and movement; nutrition; circulation and respiration; excretion and osmoregulation; immunity; nervous system; reproduction.<br>Structural plan (Bauplan) of the main phyla of Protozoans and |

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| | Metazoans (including Porifers, Cnidarians, Platelminths, Molluscs, Anellids, Arthropods, Echinoderms), focusing on their evolutionary and phylogenetic relationships. |
| **Teaching methods** | Lectures and seminars. |
| **Reccomended or required readings** | Any zoological textbook is fine.<br>Suggested book:<br>- Zoologia (di Casiraghi, De Eguilor, Cerrano), UTET Università (in Italian)<br><br>Additional textbook to go deeper into the subject:<br>- Invertebrates (di Brusca, Moore, Shuster), OUP USA (3rd edition, in English) |
| **Assessment methods** | Oral exam. |
| **Further information** | Oral exam. |
| **Sustainable development goals - Agenda 2030** | This course provides knowledge consistent with Goal 14: "Life below Water: Conservation and sustainable use of the oceans, seas and marine resources for sustainable development" and Goal 15 of the 2030 Agenda: "Life on Land: Protect, restore and promote sustainable use of the Earth's ecosystem".<br>The goals |