



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

VP33_DIP_TER

Visiting Professor Program Academic year 2021/2022

DEPARTMENT OF EARTH SCIENCES

TEACHING COMMITMENT: 24 hours

COURSE TITLE

Paleontology

TEACHING PERIOD

2nd term

SCIENTIFIC AREA

Paleontology and Paleoecology

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

- History of Paleontology
- Introduction to Taxonomy: basic concepts in taxonomy
- Taphonomy. The nature of the fossil record. Biostratigraphy. Fossil-diagenesis. Fossil-Lagerstätten
- Introduction to Paleoecology. Paleoenvironments. Synecology. Marine environments. Limiting factors. Populations and demography.
- Paleoichnology
- Biostratigraphy
- Extinctions: patterns and processes
- Origin and evolution of the Biosphere
- Systematic Paleontology: foraminiferans, calcareous nannofossils, diatoms, radiolarians, poriferans, cnidarians, molluscs, brachiopods, echinoderms, arthropods, graptolites.

LEARNING OBJECTIVES

The course aims at describing the features of the fossil record by defining the main parameters of paleobiological products within sedimentary rocks, as well as their implications in terms of paleo-environmental reconstructions and relative time expression. The course provides the knowledge of the main fossil invertebrate (poriferans, cnidarians, trilobites, molluscs, brachiopods, graptolites, echinoderms) and microfossils (foraminiferans, nannofossils, calpionellids, diatoms, radiolarians) useful in geology. The basic knowledge for the identification of the morphological characters useful for their identification is provided, together with their chronostratigraphic distribution and main taphonomic features. The key concepts of taphonomy, paleoecology, biostratigraphy and evolutionary paleobiology are also provided.

TUTORSHIP ACTIVITIES

N/A

LAB ACTIVITIES

N/A

OTHER ACTIVITIES BESIDES THE COURSE

N/A

VISITING PROFESSOR PROFILE

The Candidate should have competences in systematic paleontology, mainly focusing on Mesozoic and Cenozoic fossils. It will be greatly appreciated if the Visiting Professor adds his expertise in the fields of functional morphology and phylogeny to study in much detail the origin and evolution of modern marine biota. The Visiting Professor should also possess a solid experience in laboratory activities and in the interpretation of problematic fossils.

CONTACT PERSON AT THE DEPARTMENT

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