



UNIVERSITY OF NAPLES
"PARTHENOPE"

Department of Science and Technology



COURSE LEADER
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WHERE WE ARE

Department of
SCIENCE AND TECHNOLOGY

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UNIVERSITY OF NAPLES
"PARTHENOPE"

GUIDANCE AND TUTORING

Department of
SCIENCE AND TECHNOLOGY

First-level Degree Course

Biology
(Class L-13)

www.uniparthenope.it

COURSE OVERVIEW

The undergraduate program in Biological Sciences of Parthenope University aims to prepare graduates who have a basic knowledge in various areas of life sciences, from cellular to macromolecular systems covering the areas of microbiology, biology and physiology of both vegetable and animal life alongside with a basic knowledge of disciplines such as mathematics, physics, chemistry and computer science, providing the cultural tools necessary for a correct approach to the life sciences.

A wide range of elective modules allows the student to deepen their knowledge in specific areas of biology, in order to obtain a more vocational preparation. Also, the course aims to prepare, through specific laboratory activities, a professional with good command of methodologies and techniques concerning the main fields of biological research. A mandatory internship with public companies or facilities also allows the student a first approach in the working field.

CAREER PROSPECTS

Graduates in Biology are able to carry out technical-operational and professional support work in the field of the biology of animal and vegetable organisms and microorganisms (morphological/functional, chemical/biochemical, physiological, cellular/molecular, evolutionist and ecological/environmental aspects; reproduction, development and hereditary processes; interrelationships of living organisms; and environmental and anthropic factors that affect their survival). In designing the curriculum, the Advisory Board of Biological Sciences has taken into consideration the career paths of biologists enrolled with the Italian National Register of Biologists (section B, junior), which graduates in Biology can join after having passed the national qualifying examination.

The Advisory Board of Biological Sciences has also drawn on the national proposals of CBUI and the local information provided by the Orientation Committee

Biologists can find work as employees of private or public bodies, or as self-employed professionals in several areas of biological sciences, such as: in theoretical and applied research centres; in hygiene and prevention centres; in chemical, biological and microbiological analytical labs; in natural history museums, botanical gardens, parks, natural reserves and other protected areas; in public agencies for the monitoring of the environmental quality. The enrolment to the postgraduate academic routes of class LM-6 is also an option.

SYLLABUS

The degree course in Biology is a three-year programme characterized by a multi-disciplinary approach with chemistry, physics and maths as compulsory core subjects, which are designed to provide the cultural background and tools for the study of biological disciplines. Distinguishing and related and integrative modules are more “biologically-environmentally” oriented, ranging from ecological, microbiological, zoological and botanical disciplines to earth sciences and environmental chemistry, together with frontier disciplines like astrobiology. Students are expected to acquire a good command of research scientific methods, both working in labs and conducting fieldwork, and a sound general knowledge of the main areas of biology.

SYLLABUS

Year I	ECTS
Plant Biology and Plant Physiology with Lab	12
General and Inorganic Chemistry with Lab	9
Physics with Lab	6
Mathematics and Statistics	9
Physical Chemistry	6
Environmental and Organic Chemistry with Lab	6
Computer Science and Bioinformatics	6
Cytology and Histology with Lab	6
Year II	
Biochemistry with Lab	9
Developmental Biology and Animal Phylogeny	9
Animal Biology and Physiology	12
English Language	3
Biological Indicators	9
Microbiology with Lab	9
Elective module	6
Year III	
Ecology	9
Hygiene	9
Pharmacology and Toxicology	6
Life Cycle Assessment with Lab	9
Elective Module	6
Elective Module	6
Further skills	6
Internship	6
Final Examination	6