

Why enroll



Why enroll to Federico II?

The University of Naples "Federico II" is one of the oldest State Universities in Italy and in the world. The University is among the first in Italy for the quality of research and teaching with an optimal ratio between the number of teachers and the number of students.

Furthermore, students will be able to benefit from:

- Cutting-edge educational, computer and scientific laboratories
- University Campus equipped with study rooms, canteen services and green areas
- PhD Schools
- Advanced courses
- EU Erasmus program
- University Language Center (CLA)
- SINAPSI University Center for tutoring disabled students and for the active inclusion of students
- Scientific and technological research in collaboration with Companies, national research Centers, Botanical Garden, Anton Dohrn Zoological Station
- Agreements for internships in companies and research Centers



Useful links

Polytechnic School and Basic Sciences

<http://www.scuolapsb.unina.it>

Department of Biology

<http://www.dipartimentodibiologia.unina.it>

Student secretariat

<http://www.unina.it/-/769598-segreteria-studenti-area-didattica-scienze-mm-ff-nn->

Opening time

Monday to Friday from 9.00 to 12.00

Tuesday and Thursday also from 2.30 pm to 4.30 pm

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College of
Science Studies

MASTER'S DEGREE

Biological Sciences



Academic year 2023/24

Coordinator of the Studies Course

Prof. Elidoro Pizzo

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EDUCATIONAL OBJECTIVES

The Master's degree in Biological Sciences (degree class LM6) has the mission of training professionals in various fields of Biology. The Course, aimed at the acquisition of specific professional skills, offers the opportunity to choose among four different curricula:

- **Bio-Diagnostics**
- **Biosecurity**
- **Neuroscience**
- **Environmental Biology**

At the end of the course, students will have gained a solid knowledge in basic biology and applications. They will also acquire an adequate theoretical-practical preparation in areas of great impact for the society and job, such as biodiversity and the assessment of risks related to global changes; bio-medicine diagnostics; relationships between molecular alterations and cytology; genetics and development of pathologies; principles of biosecurity of the natural and confined environment; cellular, molecular, physiological and evolutionary aspects of the nervous system.

REQUIREMENTS FOR ACCESS

Students with a three-year degree in Biology (class L13) are admitted with direct access to the Master's Degree in Biological Sciences. Students from other degree Courses and Universities are invited to consult the following link:

<http://www.dipartimentodibiologia.unina.it/corsi-di-laurea/laurea-in-scienze-biologiche-2021/guida-dello-studente/>

where all the information useful for registration are reported.

TRAINING

All curricula are organized to guarantee training courses by balancing the acquisition of theoretical knowledge with practical activities and by combining the most current teaching and laboratory techniques.

The teaching load is divided into:

Frontal courses (72-74 CFU)
English Language Laboratory (4 CFU)
Internship (6 CFU)
Experimental activity for Thesis (36-38 CFU)

Environmental Biology Curriculum

Plant diversity and adaptations - Eco-physiological adaptations of plants - Applied zoology - Monitoring and phyto-remediation - Applied microbiology - Molecular microbiology - Hygiene and risk management and environmental safety - Environmental alterations and eco-toxicology - Plant ecology - Cellular markers and animal morpho-functional adaptations

Bio-Diagnostics Curriculum

Molecular genetics and cytogenetics - Patho-physiology of signal transduction - Diagnostics and molecular traceability in plants - Applied microbiology - Hygiene and epidemiology applied to diagnostics - Hematology - Clinical biochemistry - Molecular pathology and physio-pathology - Molecular physio-endocrinology

Biosafety Curriculum

Plant environmental protection - Animal environmental protection - Biosecurity and One-health - Hygiene and Risk management and environmental safety - Applied microbiology - Mutagenesis - Advanced biochemistry - Molecular pathology and physio-pathology - Environmental alterations and eco-toxicology

Neuroscience Curriculum

Patho-physiology of signal transduction - Cytology and histology of the nervous system - Stem cells in the study of the nervous system - Cellular neuro-physiology - Neuro-ethology - Microbiota and nervous system - Neurobiology of systems - Neurogenetics - Neuroactive organic substances

WORKING OPPORTUNITIES

The Master's Degree in Biological Sciences allows the admission to the state exam for enrollment in the senior section of the professional register of Biologists to carry out activities as a freelancer.

Graduates, regardless the chosen curriculum, will be able to participate in basic and applied research projects at Universities and public and private Research Institutes, in biotechnological industries, in pharmaceutical Companies for the development of drugs and diagnostic or agri-food methods, in Italy and abroad. The job outlet includes clinical, environmental, food analysis laboratories and biological safety and quality control in industrial production, and in anthropic activities, as well as in organizations engaged in planning and environmental management projects.

They will be able to teach or work in public bodies (e.g. Region, Metropolitan City, Municipality), public health and social facilities, hospitals and private clinical analysis laboratories, private professional firms operating in the environmental, health, or scientific dissemination area.

CONTINUATION OF STUDIES

The Master's Degree in Biological Sciences gives access to specialization Schools, PhD, second level Masters and initial training courses for Secondary School teachers.

WHERE WE ARE

All the teaching activities are at the University Complex of Monte S. Angelo Via Cintia - 80126 Naples

