Department of Biological Sciences
Faculty of Pure and Applied Sciences
Introduction

Biological Sciences are at the forefront of scientific discovery; The past few decades have provided the foundation for unprecedented advances towards understanding life at the cellular and molecular levels, characterizing the interactions between organisms and their environment and appreciating the critical importance of preserving biodiversity. In the 21st century, Biology has expanded to create novel fields, beyond its traditional scope, via synergies and interactions with Information Science, Chemistry, Physics and Engineering. Thus, Biology has become a driving force of discovery and application in the modern economy and industry, a source of improvements in health and quality of life and is leading efforts for biodiversity conservation and sustainable use of biological resources.

International Recognition

The Department of Biological Sciences is the premier research center for biosciences (Biomedical Sciences and Biodiversity/Ecology) in Cyprus. Its international recognition is reflected by its success in attracting highly competitive research funding from international and national agencies and a consistent record of high-caliber publications in prestigious scientific journals; Research groups of the Department have received funding by the ERC, Marie Curie programmes, Twinning and Teaming from the European Union, as well as infrastructure and project funding from the Cyprus Research and Innovation Foundation. Despite its small size (13 research labs), the Department has attracted more than 22 million Euro for cutting-edge research in the past few years. The Department collaborates with many universities and research institutes internationally, including many British (e.g. University of Cambridge, Imperial College, UCL, King’s College) and US universities (e.g. Harvard University, The Rockefeller University, University of Michigan) and international organizations (the EMBL).
UNDERGRADUATE Programme of Study

The Department of Biological Sciences admitted its first postgraduate students in 2003 and the first undergraduates in 2007. Courses and the curriculum were designed as to equip students to secure employment, to prepare them to continue their studies at the postgraduate level and to become involved in scientific research. Studies in our Department, at both the under- and the postgraduate level, offer an exciting scientific journey, where each student can meet their aspirations. Students are exposed to modern concepts and state-of-the-art methods throughout their studies, from introductory courses to upper-level electives, that explore major fields of Biology in depth.

Our graduates can choose to continue their studies at the postgraduate level either in Cyprus or abroad, or become employed in various sectors including secondary education, clinical and diagnostic labs, the pharmaceutical industry, medical and genetic research, biotechnology, aquaculture, organic farming, environmental management, biodiversity protection, and others. Graduates of the Department have a remarkable record of success in acceptance into top graduate schools abroad and in establishing notable careers in the Biomedical Sciences.

POSTGRADUATE Studies

The Department of Biological Sciences offers the following, internationally recognized, Master (Master of Science - M.Sc.) and Doctoral (Doctor of Philosophy - Ph.D.) programmes:

**MASTER Programmes (M.Sc.)**
- Master in Molecular Biology and Biomedicine
- Master in Biomedical Sciences
- Master in Biodiversity and Ecology

**DOCTORAL Programmes (Ph.D.)**
- Ph.D. in Biomedical Sciences
- Ph.D. in Biodiversity and Ecology

Aims

The mission of the Department of Biological Sciences is to advance research and teaching across a broad range of disciplines and at scales ranging from molecules and cells to ecosystems and biomes. We strive to foster a collaborative, engaging environment, where undergraduate and graduate students participate in cutting-edge research using state-of-the-art facilities in the laboratory and in the field. We are committed to providing the experiences that will develop critical thinking in our graduates, and to inspire them to make contributions towards the advancement of science, and the improvement of human health, the environment, and society.
FUTURE

Employment

Graduates of the Department of Biological Sciences are employed and excel, among others, in:

- Universities and other academic institutions in Cyprus and abroad (in teaching and/or research).
- Research institutions in Cyprus and abroad.
- Education, both public and private.
- Enterprises in the fields of biomedical equipment and biological reagents.
- Science funding organizations.
- Pharmaceutical companies.
- Clinical and diagnostic laboratories.
- Private companies in biomedicine, technology, education, etc.
- Governmental agencies in the fields of environment and biodiversity (Dept. of Environment, Dept. of Forests, etc.).
- Non-governmental organizations working on biodiversity and environmental conservation.
- Centers of environmental education.
Testimonies by Students/Alumni

CHRISTINA SAVVIDOU, Undergraduate Alumna and Current Ph.D. Student

My undergraduate studies at the Department of Biological Sciences of the University of Cyprus offered me lots of knowledge in all aspects of Biology and, based on these, I chose the field that fulfils my special interests. The Department of Biological Sciences offers students the chance of working in research labs in order to gain experience conducting experiments using state-of-the-art equipment. The programme of study promotes the collaboration and exchange of ideas among students, field work and visits to labs outside the University of Cyprus, as well as the development of critical thinking. The organization of departmental meetings gives to students the opportunity to get informed on current topics and research in Biology. Studies at the Department of Biological Sciences equip the students with all necessary qualifications for success in their field of choice.

MARIA KOUMA, Undergraduate Alumna and Current M.Sc. Student

I am at my 4th year of undergraduate studies at the Department of Biological Sciences. For the last year, I have carried out my thesis in the Lab of Epigenetics and Gene Regulation. My experience in the Lab has offered me all the qualifications necessary to be able to apply basic molecular methods. It has also helped me to develop skills such as problem solving, critical and analytical thinking through interpretation of research outcomes. Additionally, the courses I have attended gave me a multifaceted knowledge in biological fields. I plan to continue my studies at postgraduate level in the U.K., on cancer-related research.

MARIOS EFTYCHIOU, Undergraduate Alumnus

As an undergraduate student at the Department of Biological Sciences of the University of Cyprus, I had the opportunity to gain basic knowledge in a variety of biological fields from established scientists and teachers. At the same time, already from my second year of studies, I had the chance to participate in research projects in research laboratories of the Department. So, while being still an undergraduate student, I could work under real conditions in a research lab and understand the significance of collaboration and group work. Overall, I believe that my studies in the Department of Biological Sciences of the University of Cyprus gave me both the knowledge and skills necessary for my future academic and professional career.
CHRISTINA DEMETRIADOU,
Undergraduate and Ph.D. Alumna

During my undergraduate studies in the Department of Biological Sciences of the University of Cyprus, I gained an integrated knowledge in many different fields of Biology. Cultivation of critical thinking, as well as my direct contact with actual research, became a valuable asset for my subsequent postgraduate studies at the University of Nottingham. As a Ph.D. student at the University of Cyprus, I had the opportunity to present my research in prestigious scientific conferences abroad, in one of which I was awarded the best presentation award. In addition, I gained the opportunity to get trained in research centers and universities abroad, like the Max Planck Institute and the University of Southern California. Part of my research has been published in international scientific journals.

NEOFYTOS CHRISTODOULOU,
Ph.D. Alumnus

My studies at the Department of Biological Sciences enriched my knowledge in both theoretical and practical aspects of Molecular Biology and Embryology. During my Ph.D. studies, I had the opportunity to participate in international scientific conferences and publish my Ph.D. research in prestigious international scientific journals. After I finished my Ph.D. studies, I was able to successfully work as a post-doctoral researcher at the University of Cambridge, due to the solid background I had established during my doctoral studies. My post-graduate research has been published in high caliber scientific journals. Today, I am a Marie Curie Fellow at the Department of Biological Sciences.

PANTELIS-SAVVAS IOANNOU,
Undergraduate and M.Sc. Alumnus

My undergraduate studies at the Department of Biological Sciences gave me a solid foundation and integrative knowledge in Biological Sciences, at both the theoretical and the technical and scientific levels. The postgraduate programme in Biomedical Sciences further widened my knowledge, by delving deeper into more specialized subjects in various fields of modern research. Additionally, within the frames of both my undergraduate and my postgraduate theses, I had the chance to conduct pioneering research in the fields of Molecular Biology and Embryology. During my studies, I could interact with the highly trained and established academic staff of the Department. After finishing my studies, thanks to what my studies in the Department have equipped me with, I continue my studies at a Ph.D. level with a full four-years scholarship at the Department of Biochemistry of the University of Cambridge. The quality of the programmes of study offered by the Department of Biological Sciences of the University of Cyprus fully matches the quality offered by the most competitive universities all around the world.

IOANNA KALVARI, Ph.D. Alumna

Having completed my undergraduate studies in Informatics, my love for Biology combined with my curiosity and thirst for further knowledge, led me to pursuing new opportunities for development of my skills and job training. The multifaceted and well-structured postgraduate programme of study of the Department of Biological Sciences of the University of Cyprus, together with the Lab of Bioinformatics that unifies the two sectors into a single research field, has proven to be an important pillar supporting my doctoral studies and, later on, my professional career and development both in Cyprus and abroad.