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PROSPECTUS

Rector

Professor Christos Nikolaou

Vice-Rector for Academic Affairs and Personnel

Professor Michalis Damanakis

Vice-Rector for Financial Planning and Development

Professor Nikolaos Siafakas

Dean of Faculty of Philosophy

Associate Professor Ioanna Giatromanolaki

Dean of Faculty of Education

Professor George Krasanakis

Dean of Faculty of Social Sciences

Associate Professor Kostas A. Lavdas

Dean of Faculty of Sciences and Engineering

Professor Susanna Papadopoulou

Dean of Faculty of Medicine

Professor Panayotis Vardas

Welcome to the University of Crete and our 2003 prospectus.



The University of Crete is the leading research University of Greece. Although still very young – we celebrated our 25th anniversary last year – it is conducting cutting-edge research. Our researchers and students work on such diverse fields as molecular biology and biotechnology, ecosystems and the environment, lasers and ophthalmology, medical imaging,

digital libraries, archaeological excavations in Eleftherna, studies on the social and economic transformations in the Mediterranean basin, and education policies in a multicultural environment, just to name a few. You will sense the enthusiasm for learning and the high degree of close cooperation of our University with leading research and academic institutions around the world.

Your stay in Crete can become a unique life experience. The island is the birth place of El Greco, the great Renaissance painter and a subject of innovative research in our University; of Eleftherios Venizelos, the most important Greek politician of the 20th century; and of Nikos Kazantzakis, the writer of world renown. Crete has a rich history of successive civilization layers and constant struggle for freedom and democracy, a breathtaking natural variety and a tradition of openness and hospitality. So, open your minds and hearts, experience, enjoy and grow!

Christos Nikolaou Rector







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PART I: THE UNIVERSITY OF CRETE

A Public University in Two Cities

GENERAL DESCRIPTION

The University of Crete, a public University situated in the two cities of Rethymno and Heraklio, was established in 1973 and started functioning in the academic year 1977-78. The seat of the University is in Rethymno. The University consists of five Faculties and 17 Departments and has 10,628 students (8,962 at the undergraduate level and 1,666 at the postgraduate level) and 614 teaching and research staff members (412 permanent and 202 temporary). It is a University known, both nationally and internationally, for its innovative approach to education, considerable research activity and dynamic character in international cooperation.

The University Campus in Rethymno is 150 hectares in size, located about 4 km from the city of Rethymno is the area of Gallos. Three of the Faculties of the University - the Faculties of Philosophy, Education and Social Sciences - are located at this Campus, along with many of the University's Administrative Services and the Central Library.

The University has two campuses in Heraklio, about 80 km east of Rethymno. At the Knossos Avenue Campus are four of the seven Departments of the Faculty of Sciences and Engineering. Specifically, these are the Departments of Mathematics, Chemistry, Computer Science, and Applied Mathematics. A number of Administrative Services and a branch of the Library are also housed at the Knossos Campus, which is 4 km south of Heraklio, very close to the archaeological site of Knossos. Over the next several years, the Departments at the Knossos Campus will gradually relocate to the Campus at Voutes.

The University Campus at Voutes, some 10 km southwest of the city of Heraklio, houses the other three Departments of the Faculty of Sciences and Engineering, which are the Departments of Physics, Biology, and Materials Science and Technology. Also located at Voutes are the Faculty of Medicine complex and the University Hospital. Two branches of the University Library, with services for the relevant disciplines, operate at Voutes. The Foundation for Research and Technology Hellas (FORTH), with which the University collaborates closely, is located close by.

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ADMINISTRATIVE STRUCTURE

University Administration

The University of Crete is governed by the University Senate, the Rector's Council, and the Rector.

University Senate. The composition of the Senate is specified by law and includes - in addition to the Rector and the Vice-Rectors - the Deans of the Faculties, the Presidents of the Departments, a student representative from each Department, two postgraduate student representatives, a representative of the Specialized and Laboratory Teaching Personnel, a representative of the Specialized Technical and Laboratory Personnel, a representative of the Administrative Personnel, and representatives of the Teaching and Research Personnel.

Rector's Council. The Rector's Council is composed of the Rector, the Vice-Rectors, one student representative chosen from and by the student representatives to the Senate, and the Head of the Secretariat.

Rector. The Rector represents and governs the University, convenes the Senate and the Rector's Council, draws up the agenda and presides over their meetings, and sees that their decisions are carried out. The Rector is assisted in the execution of his/her duties by the Vice-Rectors for Academic Affairs and Personnel and for Financial Planning and Development, whose duties are determined by the Senate.

Rector
Professor Christos Nikolaou

Tel: (0030) 28310 77900 or 2810 393210 Fax: (0030) 28310 77909 or 2810 210106 e-mail: nikolaou@rector.uoc.gr

Vice-Rector for Academic Affairs and Personnel Professor Michalis Damanakis

Tel: (0030) 28310 77900 or 2810 393315 Fax: (0030) 28310 77909 or 2810 393212

e-mail: damanakis@rector.uoc.gr

Vice-Rector for Financial Planning and Development Professor Nikolaos Siafakas

Tel: (0030) 28310 77900 or 2810 393315 Fax: (0030) 28310 77909 or 2810 393212 e-mail: siafakis@rector.uoc.gr

Administrative Services

The Administrative Services of the University of Crete are organized in the following way.

Tel: 0030 28310 77906

General Director The General Directorate of Administrative and Financial Services coordinates the operation of the following

Director Administrative Services Directorate

Christos Pandazis e-mail: pantazis@admin.uoc.gr

> Director (Heraklio) Petros Larentzakis

Tel: 0030 28310 77922 This Directorate deals primarily with work-related issues of all types concerning all University personnel, and also with personnel disciplinary issues and retirement procedures, as Tel: 0030 2810 393181 well as administrative support services.

Andreas Tsichlakis

Director Financial Management Directorate

Tel: 0030 28310 77934 e-mail: tsixlakis@ admin.uoc.gr

Director (Heraklio) Georgios Zografistos Tel: 0030 2810 393150 property.

e-mail: zografistos@admin.uoc.gr

This Directorate manages all of the financial matters of the University, as well as the issues related to budget, payroll, management of expenditures, procurement, and University

Director Education and Research Directorate

Evangelia Vidaki e-mail: bidaki@admin.uoc.gr

Tel: 0030 28310 77938 The role of this Directorate is to provide administrative support to the academic units of the University, with regard to undergraduate and postgraduate studies.

Director International and Public Relations Directorate

Dr Stella Papadaki-Tzedaki e-mail: papadaki@admin.uoc.gr

Tel: 0030 28310 77946 The role of this Directorate is to study, make recommendations on and carry out activities concerning the University's international and public relations.

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General Director Manolis Anroulidakis Tel: 0030 28310 77712

The General Directorate of Technical Services and Information Technology Systems coordinates the operation of the following Directorate:

Themistoklis Vouvourakis

Director Technical Works Directorate

Director (Heraklio) Ioannis Androulakis

Tel: $0030\ 28310\ 77715$ The role of this Directorate is the preparation of technical studies for constructions or repairs; the supervision, control and coordination of the implementation of these works; the Tel: 0030 2810 394766 maintenance of University building facilities and their components; as well as the development of the University grounds.

Eleni Diamantaki Tel: 0030 28310 77802 e-mail: diamant@libr.uoc.gr section below.

Director The Library Directorate - Information regarding the services of the Library Directorate is presented in detail in the Services

SERVICES

THE UNIVERSITY LIBRARY

The University of Crete Library was established in 1978. The central library, primarily oriented toward the Humanities, Education and Social Sciences, is located at the Rethymno Campus, while in Heraklio the library has three branches. The Knossos branch serves the disciplines of Mathematics, Chemistry, Computer Science and Applied Mathematics, while at Voutes there is one branch serving the Faculty of Medicine and another for the Departments of Physics, Biology, and Materials Science and Technology.

All active members of the academic community of the University of Crete undergraduate and postgraduate students, faculty members and administrative staff have the right to use the library material and services. In all branches of the Library, users have access to workstations through which they may use the available electronic resources. Photocopying machines operating with magnetic cards, printers, scanners and microfilm readers are also available.









Library Services

The central library in Rethymno has 250,000 book titles and 40,000 periodical volumes (1,300 current subscriptions), along with reference material, a short loan collection, and closed access collections. The Knossos branch library has 25,000 book titles and 628 periodical volumes (329 current subscriptions), as well as reference material and a short loan collection. The Voutes branch library for the Departments of Physics, Biology and Materials Science and Technology includes 9,000 book titles and 263 current subscriptions to periodicals, reference material and a short loan collection. The Voutes branch library for the Faculty of Medicine holds 12,000 book titles, 350 periodical volumes (85 current subscriptions), reference material and a short loan collection.

The Library of the University of Crete is fully automated by an Integrated Library System called PTOLEMEOS II, which is a product of close cooperation between the Library and the Computing Centre of the University. This system is the main tool for searching the library print material, and is accessible either in text mode through telnet, or in web interface on a WWW/Z39.50 client application. The WWW interface is more user-friendly and offers advanced searching options. It also provides the possibility of connecting to multiple electronic catalogues in Greece or nationwide simultaneously. The database of the Rethymno branch includes about 230,000 bibliographic records and is the second largest in Greece. The database of the Heraklio branch includes 36,000 bibliographic records.

The Library Automation team - All the library's electronic services are supported by an I.T. & R.D. Unit, strongly specialized in library automation. The team, which supervises and develops the Integrated Library System, is responsible for the introduction of Information Technology to the Library, and also cooperates with companies and organizations throughout the country and abroad, within research projects related to automation and implementation of I.T. in the Library.

Reference Service - The Libraries in Rethymno and Knossos provide an official reference service to which users can address their enquiries. One main objective of the reference service is to educate users so that they can take full advantage of the available tools.

Interlibrary Loan Service - All of the Library branches provide interlibrary loan service and, according to statistical data, the Library of the University of Crete is one of the busiest libraries in Greece in terms of interlibrary loan requests and transactions. The Library is a founding member of Hermes, the Greek serials union catalogue.

Electronic Journals - The Library holds a significant - and rapidly growing - collection of electronic journals (approximately 3,000 journal titles).

Databases - The Library provides access to specialized and multi-disciplinary databases in Greece and abroad. The databases can be accessed either on-line or through the local CD-ROM network of the Library. With the addition of the journals that are provided through the online databases, the Library provides access to more than 10,000 journal titles (more than 5,000 full text).

The Library is a founding member of HEAL-Link, the Greek academic libraries consortium, which promotes cooperation among its members and supports common subscription to electronic resources and information services.

Digital Library - The Library of the University of Crete is one of the first among the Greek libraries to create a collection in digital format. At present the collection consists primarily of the theses and dissertations written by students at the University of Crete, along with technical reports and journals published within the University of Crete academic community, and a few digitised gravures. The digital library is freely accessible through the library web pages (http://dlib.libr.uoc.gr/).

The European Documentation Centre - The Centre was established in July 1999 by a joint decision of the University of Crete and the Committee of the European Union and operates as a department of the University Library in Rethymno. It cooperatives closely with the Departments of the University that offer courses or conduct research related to issues of European integration.

More information about all of the above services and how to use them, as well as information about the numerous other services offered by the University Library, can be found at the Library's website (http://www.libr.uoc.gr/). This website contains a full description of all the services offered, the activities in progress, the infrastructure of the library, and technical details. The website enables users to search and browse the library's collections, both print and electronic. All the available electronic resources are grouped together in sections (CD-ROMs, on-line databases, electronic journals, etc.), while the print collections may be traced through the electronic catalogue. Through the library website, electronic contact can be made with the interlibrary loan service to order material that the library does not hold, or the reference service for general or more specific enquiries.

Central Library (Rethymno)

Tel: 0030 28310 77810, Fax: 0030 28310 77850

Hours: Monday - Friday: 09:00 - 22:00, Saturday: 09:00 - 14:00

Faculty of Sciences and Engineering Branch (Knossos)

Tel: 0030 2810 393230, Fax: 0030 2810 393234

Hours: Monday - Friday: 08:00 - 20:00, Saturday: 09:00 - 14:00

Faculty of Sciences and Engineering Branch (Voutes) Tel: 0030 2810 394313. Fax: 0030 2810 394312

Hours: Library (3rd floor) Monday - Friday: 08:00 - 20:00

Short Loan Collection (mezzanine): Monday - Friday: 12:00 - 17:00

Reading Room: 24 hours a day

Faculty of Medicine Branch (Voutes)

Tel: 0030 2810 394789, Fax: 0030 2810 394793

Hours: Monday - Friday: 08:30 - 20:00

INTERNATIONAL RELATIONS AND EUROPEAN PROGRAMMES

The Departments of International Relations and European Programmes, operating in both Rethymno and Heraklio, disseminate information regarding educational programmes, both international and European, to the University community. They also provide information and administrative support to faculty members regarding the preparation and submission of proposals for new educational programmes. Through the support of these Departments, the University has made successful applications for programmes including: Jean Monnet (University courses and European Integration), Tempus Tacis and Tempus Phare, Leonardo da Vinci, and the Socrates/Erasmus programme (European Union action programme, in collaboration with Universities).

The Department employees in both Rethymno and Heraklio work primarily on the Socrates programme, which deals with the cooperation of the University of Crete, through its academic departments, with Universities in the European Union countries, as well as the countries of Cyprus, the Czech Republic, Hungary, Poland, Slovakia, Estonia, Letonia and Lithuania. Specific activities include providing information and assistance to University of Crete students and faculty members wishing to go to another University under a Socrates grant (outgoing), and to students and faculty members of

other Universities who visit the University of Crete under a Socrates grant (incoming). In addition, the Department works on the development of common programmes of study at the beginning, intermediate and advanced levels, and intensive programmes.

The objective of the Departments is to strengthen the participation of the members of the University of Crete community in programmes involving European or international cooperation, to promote cooperative agreements with institutions in the United States and Canada in order to attract students of Greek origin living abroad, and to inform international Universities about the University of Crete using both printed and electronic material. The Departments in Rethymno and Heraklio work cooperatively in these endeavours; their services differ only with regard to certain activities that apply only to a given Faculty.

Rethymno

Tel: 0030 28310 77724, Fax: 0030 28310 77725

e-mail: alefandinou@admin.uoc.gr, pantazidou@admin.uoc.gr, vasilaki@admin.uoc.gr

Heraklio

Tel: 0030 2810 393177, Fax: 0030 2810 210073

e-mail: anton@admin.uch.gr, kosma@admin.uch.gr, toufex@admin.uch.gr

CAREERS SERVICE

The Careers Service is a new institution in Greek Universities and is co-funded by the Greek Ministry of Education and the European Union. The University of Crete Careers Service was founded in 1997; the central service operates in Rethymno and two more services are located in Heraklio.

The objective of the Careers Service is to facilitate the transition of graduating students into the labour market. The Careers Service is an information and advisory service that provides students and graduates with information on job openings, vocational training, postgraduate study and scholarships, CV-writing, career planning, job search, company profiles, labour market trends, TOEFL, GRE and GMAT preparation, useful websites, study/work abroad, summer schools and so forth. It offers seminars on CV-writing and career planning and development, and organizes Career Fairs and Postgraduate study/Scholarships presentation days. The Careers Service also conducts surveys on the professional development of graduates, and has developed a database of the CVs of graduates.

Faculties of Philosophy, Education and Social Sciences - Rethymno

Tel: 0030 28310 77726/7, Fax: 0030 28310 77728

e-mail: liodaki@admin.uoc.gr

Faculty of Sciences and Engineering - Heraklio

Tel.: 0030 2810 394010/20, 393370, Fax: 0030 2810 394021

e-mail: manolik@physics.uoc.gr

Faculty of Medicine - Heraklio Tel/Fax: 0030 2810 394754 e-mail: sturnara@med.uoc.gr

SPECIAL RESEARCH FUND - RESEARCH COMMITTEE

The role of the Research Committee, supported by the Secretariat of the Special Research Fund (tel: 0030 2810 393155 in Heraklio and 28310 77914 in Rethymno), is to distribute and manage the funds that come to the University from any source to cover any type of expenditure necessary for:

- · Research, education, training or development
- · Projects for the provision of scientific, technological or artistic services,
- The preparation of special studies that contribute to the linking of education and research with production, and that are carried out by scientific personnel of the University alone or in cooperation with other specialized scientists.

The Research Committee, following current trends and developments, reviews its role continuously in order to facilitate the educational and research development of the University.

CENTRE OF COMMUNICATIONS AND NETWORKING

The Centre of Communications and Networking (CCN) is a dynamic unit within the University of Crete, whose purpose is to provide high quality network and telecommunications services for end users, as well as for research, educational purposes and administrative procedures. The Centre (tel: 0030 28310 77044 in Rethymno and 0030 2810 393312 in Heraklio) also participates in national research and development programmes, plans and pilots, and takes part in the current evolution of telecommunications technology and services.

THE STUDENT CULTURAL CENTRE - THE XENIA

The Xenia, a Student Cultural Centre, is located in Rethymno (46 Nik. Psarrou Street) and operates under the auspices of the University of Crete. The Xenia has multi-purpose rooms with a seating capacity of about 200, which are used for meetings, conferences and other events organized by the University or other cultural organizations in Rethymno. In addition the Xenia offers an area suitably equipped for exhibitions of various types.

Rooms in the Xenia, which also has housing facilities for Greek students during the winter and spring semesters, are made available - for a nominal sum - to international students attending summer classes at the University.

Further information is available in Rethymno at 0030 28310 77729, 77947 and in Heraklio at 0030 2810 393183.

HOUSE OF EUROPE

The House of Europe provides accommodation to scientists, both Greek and international, who are visiting the University for teaching or research purposes, to



collaborate on projects, or to attend workshops or conferences sponsored by the University. It offers nine double rooms and two single rooms, all with private bathrooms and air conditioning. It also provides a library and meeting room, a lounge with television and music, and a dining room. The name, House of Europe, was chosen to reflect the European orientation of the University of Crete.

The House of Europe is located in the Old Town, between the Venetian Harbour and the Fortezza. The southern part of the building was an old mansion that has been fully restored, whereas the northern part is newly built in accordance with traditional architecture, thus complementing the older part of the building. Planning, supervision

and decoration of the building were carried out by the Technical Services of the University.

Tel: 0030 28310 51957 (08:30 - 13:30 and 18:00 - 21:00), Fax: 0030 28310 51957

NATURAL HISTORY MUSEUM OF CRETE

The Natural History Museum of Crete, which is under the Faculty of Sciences and Engineering, is divided into five sections relating to: Zoology, Botany, Anthropology, Palaeontology, and Geology and Minerals. In the exhibition area of the Museum, the most important elements of the natural environment are displayed; the exhibit is supported by dioramas of the most characteristic ecosystems of the area. In each of the



specially designed rooms, there are two dioramas of ecosystems (representations in actual size), one from Crete and one from mainland Greece. In this way, visitors have the opportunity to learn about the various ecosystems of Crete and, at the same time, to compare them with

those of mainland Greece. The ecological relationships with other Mediterranean areas are portrayed either through small dioramas or through pictures with explanatory texts.

In addition there are special exhibits on endangered animals, on large, herbivorous mammals that have importance for Greece or Europe, and on unique geological and ecological formations such as caves and gorges. In the exhibit on rocks, mineral and fossils, information is given regarding the geological development of Crete and the surrounding areas, while the botanical garden gives visitors the chance to see and smell plants that are found only in Crete. Another area of the Museum is devoted to the evolution of human life and its appearance in Crete. One of the most innovative features of the Museum is the linking of archaeological findings from the Minoan period with environmental data. The exhibits are funded by the INTEREG II programme.

Address: 157 Knossos Avenue, Heraklio

Hours: Monday - Friday 09:00 - 15:00, Sunday 10:00 - 18:00

Tel: 0030 2810 324711

THE VARDINOYIANNION EYE INSTITUTE OF CRETE

The Vardinoyiannion Eye Institute of Crete (VEIC) first started operating in 1989 along with the Ophthalmology Clinic of the University Hospital of Crete. The Institute is at the forefront of developments in the field of Ophthalmology, and focuses on research, education and health care services as follows:

Research: The main research areas are refractive surgery, visual optics, medical lasers,



photodynamic therapy, biopolymers, retina, image analysis, design and development of microsurgical instruments.

Education: The interdisciplinary postgraduate program entitled "Vision and Optics" in collaboration with the Departments of Physics and Mathematics of the University of Crete and the Foundation of Research and Technology Hellas (FORTH) in Crete.

VEIC organizes international mini-fellowships in Refractive Surgery as well as oneyear fellowships in Refractive Surgery. Ophthalmologists from all over the world have participated in these activities.

VEIC co-organizes the "Aegean Cornea" and "Aegean Retina" Conferences on a biannual basis in collaboration with the Harvard Medical School. It also organizes a "Summer School in Visual Optics" on a yearly basis.

Health care services: The Clinical activities include refractive surgery, photodynamic therapy, and clinical electro-physiology.

VEIC is internationally recognized as the birthplace of the "LASIK technique" for the correction of refractive errors, which is currently the most common operation on the human body.

Tel: 0030 2810 371800, 392450, Fax: 0030 2810 394653,

Webpage: www.eyeinstitutecrete.com



THE ISLAND OF CRETE

Crete, the largest of the Greek islands, lies to the southeast of the Greek mainland in the Mediterranean Sea. It is 260 km long with a width that ranges from 12 to 60 km. Crete's unique geographical position – between Europe, Asia and Africa – has shaped its history from antiquity to modern times. Today the island has a population of over 600,000 people. While Crete has a modern, rapidly growing economy based on tourism and agriculture, the Cretan people, especially those in small towns and villages, still maintain time-honoured customs and traditions, including Cretan music played on the Cretan *lyra*, Cretan dances like the *pendozalis*, and Cretan food.

The island of Crete has a rugged, mountainous terrain, with numerous gorges and ravines. The most well known is the Samaria Gorge, which is 18 km long and has vertical walls of rock that reach a height of 500 m. Samaria is the last refuge of the *kri-kri*, the Cretan wild goat, and home to many rare Cretan wildflowers. Samaria and the many other ravines in Crete have played a crucial role in preserving the rich flora and fauna of the island, because they are far removed from human activity.

Crete has a rich and fascinating history. Modern archaeological discoveries reveal that from about 3000 to 1200 BC Crete was the centre of a flourishing Bronze Age civilization. The Cretan cultural achievements of this period, called the Minoan period, rivalled those of Egypt and Mesopotamia in the same period. The island had 90 independent cities, the greatest of which was Knossos, capital of the realm of the legendary Cretan king Minos.

In 67 BC the island was conquered by the Romans. In 395 AD it passed to the Byzantine Empire. The island fell to the Arabs in 826 and remained under their rule until 961, when it was re-conquered by the Byzantines. Following the Fourth Crusade (1204), Crete was sold to the Venetians. In 1645 the Ottoman Empire began military operations in Crete against the Venetians, completing conquest of most of the island in 1669 and acquiring complete control in 1715. Cretan revolts against Turkish rule subsequently occurred and in 1913, following a bitter and lengthy struggle, Crete was ceded to Greece. Cretan people are known for their love of freedom and independence; they have played a leading role in all the struggles of the Greek nation.

Crete's archaeological sites – most notably the Minoan palaces at Knossos and Phaistos, its rich historical and cultural development, and its striking natural beauty, make it an ideal location for a university.

THE CITY OF RETHYMNO

Rethymno, a small city of about 25,000 inhabitants, is located on the northern coast of Crete, almost midway between the two larger cities of Chania and Heraklio. Rethymno is a charming blend of old and new. At the western edge of the city's Old Town, there is a large fortress – the Fortezza – dating from the Venetian rule in the 16th century. It has strong walls reinforced by four bastions, and many buildings preserved within. Just outside the Fortezza is the Archaeological Museum whose exhibits include finds from the Neolithic, Minoan, Hellenistic and Roman periods. Also within the Old Town are the intricately-decorated Rimondi fountain, the Venetian Loggia, Turkish houses with enclosed gardens and sheltered balconies, minarets, and many other buildings of historical significance.

At the same time, Rethymno offers all the modern conveniences, and activities for just about every interest. For those who want to relax and enjoy the warm weather, there is a long sandy beach that starts in the town and stretches for 12 km. There is usually fresh fish to be found in the tavernas around the picturesque Venetian harbour; there are many other restaurants and tavernas in the city that offer typical Cretan cuisine and many other types of food. There are three cinemas in the city; music clubs, pubs and bars are also widespread. There are many small shops with attractive merchandise and souvenirs in the Old Town as well as stores with traditional Cretan handicrafts. In the summer the city sponsors a Renaissance Festival, which is the highlight of the city's cultural activities. The Festival hosts a variety of theatre, music and dance performances in the ancient amphitheatre inside the Fortezza.

Despite its rapid growth, Rethymno has retained its traditional character. In the 16th and 17th centuries, the town of Rethymno developed a reputation as a centre of Arts and Letters, which it has maintained to the present day. More information at www.rethymnon.gr.

THE CITY OF HERAKLIO

The city of Heraklio, with a population of about 150,000 inhabitants, is the largest city in Crete and one of the largest cities in Greece. It is situated on the northern coast

of the island and accounts for most of the economic activity of Crete. It has a large, busy port and an international airport that receives about 15 percent of the total tourist traffic of Greece. The airport is named after Nikos Kazantzakis, the Cretan writer, poet and philosopher who was born in Heraklio.

Many Venetian monuments still remain in Heraklio, such as the Venetian walls which surround the old part of the city, the port fortress (Koules), the Venetian Loggia, and the Fountain with Lions built by the Venetian governor Morozini in 1628. The Archaeological Museum of Heraklio has exhibits ranging from Neolithic findings (5000 BC) to Roman remains (4th century AD) and is one of the best in the world; there is also a Historical and Ethnographic Museum. Located on the outskirts of Heraklio (5 km from the city centre) is the Minoan palace of Knossos. The famous Renaissance painter Domenikos Theotokopoulos, who became known as El Greco, was born in the nearby village of Fodele.

The city is host to cultural activities with a local, European and international dimension and appeal: art exhibitions, theatre, literary events, international conferences, and scientific meetings. In July and August, the Summer Festival takes place at Kazantzakis Theatre, which is situated in the park near the New Gate. The Festival includes ballet and theatrical performances, as well as classical, traditional, and modern music concerts.

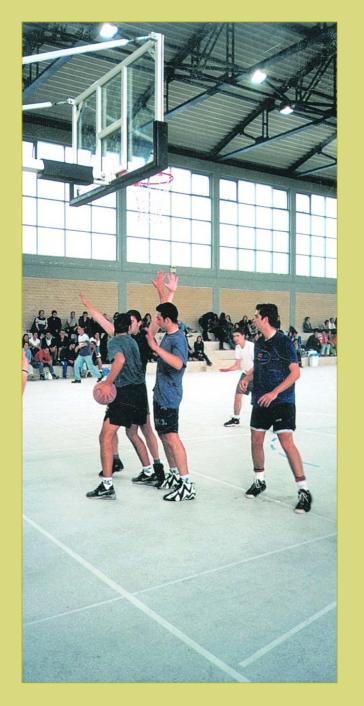
The central square of the city, Eleftherias Square, is a pedestrian area surrounded by cafes, stores and restaurants. Raki, a traditional Cretan white spirit, can be enjoyed in special taverns called "rakadika" that also offer a variety of traditional Cretan appetizers. The city has numerous music clubs and bars, as well as four cinemas.

Heraklio is a rapidly growing, cosmopolitan city that plays a vital role in the economic, scientific and cultural development of Crete. More information at www.heraklion.gr.















PART III: STUDENT INFORMATION

SERVICES FOR STUDENTS

Accommodation

The University of Crete has no on-campus accommodation for students at present. However, the University provides rooms for a limited number of students at hotels that have a special agreement with the University. In addition the University subsidizes the rent for students who are entitled by law to free housing. Furthermore, in Rethymno the University provides housing for 60 students at the Xenia, the Student Cultural Centre.

The Office of International Relations and European Programmes in Rethymno and Heraklio assists international students in finding accommodation at reasonable prices. However, all rental terms are negotiated between the tenant and the landlord. As in all Universities, it is difficult to house all international students. It is therefore essential to send the accommodation form in time, stating the exact dates of arrival and departure. Upon arrival, all students should be prepared to pay a deposit equivalent to two months of rent.

Catering

The University restaurant in Rethymno is a modern facility with a panoramic view of the sea that seats more than 400 students. In Heraklio students can eat at the University restaurants at either the Knossos or Voutes campuses.

Based on criteria specified by law, some students are entitled to a catering card allowing them to eat at the University restaurant at no cost. All other students, including Erasmus students, can buy a catering card at a reasonable price that entitles them to lunch and dinner daily. Cards can be purchased for either a fortnight or a month, but they are sold only on the 1st and the 15th of every month. Single meals can be purchased without a card, at a slightly higher rate. The restaurants in both Rethymno and Heraklio offer vegetarian meals.

Health Care Services

All undergraduate and postgraduate students at the University are entitled to free health care, including medical care and hospitalisation services, diagnostic tests, dental care, physical therapy and other services. At the University facilities in Gallos, there is a student infirmary staffed by a doctor of general pathology that operates in the offices below the University restaurant (Tel: 28310 77980, 77983). In Heraklio medical services are provided to students at the University Hospital.

International students enrolled at the University are also entitled to free health care and social security in Greece, after submitting the appropriate forms (including an E128 or E111 form from the health insurance service of their home country).

Counselling Centre

The University Counselling Centre offers counselling and support services, free of charge, to students seeking assistance with a wide range of problems, including difficulties adjusting to a new style of living, difficulties in family or interpersonal relationships, loneliness, stress, lack of motivation, and so forth.

In Rethymno the Centre is located in the offices below the University restaurant (Tel: 28310 77979, e-mail: rskf@admin.uoc.gr) while the Centre in Heraklio is at the Student Centre at Voutes (Tel: 2810 394885/6, e-mail: hskf@admin.uoc.gr).

Bus Services

Students are entitled to use local bus transportation to and from the University at a reduced rate. A bus pass can be obtained from the Secretariat of each Department. The University also has a contract with a private company for bus service to and from the University for all members of the University community. A pass to use this service can be purchased from the Office of Student Welfare.

Note: Additional information about all the above services for students (accommodation, catering, health care, counselling or bus services) can be obtained from the Office of Student Welfare in Rethymno (Tel: 0030 28310 77729, 77947) or Heraklio (Tel: 0030 2810 393183). International students should contact the Office of International Relations in Rethymno (Tel: 0030 28310 77424) or Heraklio (Tel: 0030 2810 393177).

Auditing Courses

Any person who is 17 years of age or older can audit one or more courses at the University, as long as s/he has written permission from at least one professor of the course(s) s/he wishes to audit, and also submits a written application, a birth certificate and a diploma from a secondary school. International students who are at the University for a limited period of time and do not wish to officially enrol in a certain course are also allowed to audit.

Computer Facilities

In Rethymno, there are three computer laboratories equipped with PCs, Internet access and printing facilities. The laboratory personnel can help the students to use word processors, image processors, statistical programmes, electronic mail and to navigate the web. Computers are also available to students in the University Library.

In Heraklio, at each campus there are rooms fully equipped with computers (PCs, X-terminals and workstations) where students can be trained 6 days per week from 09:00-21:00. Visiting students may have access to Internet during their study period at the University.

Student Unions

In both Rethymno and Heraklio, students of the different Departments of the University can join the Student Union of their Department. The Student Unions can provide students with useful information about the Department, about cultural and athletic activities, about the University, about the city, and so on.

Cultural Activities

There is a wide range of different cultural activities available on both the Rethymno and the Heraklio campuses. Many clubs and groups provide students the opportunity to spend time creatively and to develop their talents. Among the many clubs operating on the Rethymno campus are the cine-club that includes two sections, one projecting films and the other making films; a photography club that occasionally organises exhibitions; a theatre group, which gives performances once or twice a year; and a music club, which brings together people who share the same interests in music. The cultural groups in Heraklio include the University choir, a theatrical team, a photography club, a dance club, a painting club, a blood donors' team, and many more.



More detailed information about cultural activities can be obtained from the Student Unions and the University announcement boards.

Athletic Activities

In Rethymno, the students of the different Departments of the University have the opportunity to take part in various athletic activities, including soccer, basketball, volleyball, traditional dances and ping-pong. During the course of the year there are tournaments between different Departments and selected athletes participate in Inter-University tournaments. For further information, students can call 28310 77598.

In Heraklio, the Physical Education & Athletics Bureau hosts many athletic activities. The Bureau is based at the Knossos campus (Tel: 2810 393427). Team sports such as soccer, basketball and volleyball can be joined through the Union of each department; water sports are also very popular. In the beginning of each academic year announcements concerning the athletic activities offered are posted on special stands around the University.

PRACTICAL INFORMATION FOR INTERNATIONAL STUDENTS

Host Country Formalities

For students from European Union countries, the only document required to enter Greece is a passport or an identity card valid for the length of their stay. Students who are not EU citizens should contact the Greek Embassy in their home country to obtain information about the necessary formalities for entering Greece.

After arrival, a residence permit is required for all non-EU students. *The students should carry the permit with them during their stay in Greece and return it before departure at the airport or other port of exit. They will also need to pay a sum of 58-175 euros, depending on their length of stay and country of origin. To obtain the permit, students need the following documents:

- I. A valid passport
- 2. Five photographs
- 3. A certificate from their University of Origin stating the programme under which they are visiting the University of Crete, the length of their stay and their sources of funding
- 4. A Registration Certificate from the University of Crete
- 5. A Health Insurance booklet

The permit is issued by the Office for Foreigners at the Central Police Station.

Address in Rethymno: Iroon Politechniou Square, Tel: 28310 55001 Address in Heraklio: Dock 2, Limenas (Port), Tel: 2810 222597

Greek Language Courses

The University of Crete offers courses in Modern Greek as a foreign language throughout the year. The winter schedule is from October to January and the spring schedule is from February to May. The courses are held in Rethymno and Heraklio. Each course covers approximately 70 teaching hours and is offered at three levels: Beginners, Intermediate and Advanced. The courses are free for the international students of the University and open to anyone who would like to learn Modern Greek or improve his/her knowledge of the language.

The summer course (July) is an intensive course that covers 80 teaching hours in four weeks. It is also offered at three levels (Beginners, Intermediate and Advanced).

The University also organizes Modern Greek courses for specific purposes, in cooperation with national and international institutions. The courses are mainly communicative, encouraging oral and written production in everyday situations. At the same time, they highlight the main structural features of Modern Greek (grammar points for the beginning and intermediate levels are explained in English). The teaching method and materials, as well as the experienced staff, make these courses a perfect choice for anyone who would like to learn the language.

More information can be obtained by sending an e-mail to moderngreek@phl.uoc.gr.

^{*} A residence permit is required for EU students too, if their stay exceeds a period of three months. No fee is required.

Cost of Living

Living expenses are estimated to be about 625 euros per month. More specifically, costs are estimated as follows:

Accommodation 250 euros
Catering (self-catered) 140 euros
Bus fares 35 euros
Other expenses 200 euros

Telephone Services

Almost all telephone booths require the use of a phone card. In Rethymno cards can be purchased from the OTE Office on Koundouriotou Avenue or from the Post Office on Moatsou Street. In Heraklio cards can be purchased from the OTE Office on Theotokopoulou Street or from any branch of the Post Office. Most kiosks and newsagents also sell them.

Cheap rates for direct calls to Europe are in effect between 22:00 - 06:00 local time. Dial in sequence: 00- country code- area code – local number.

Important Telephone Numbers in Rethymno (area code 28310)

First aid - Emergencies (EKAB): 166

Police emergency: 100 Fire emergency: 199

General Hospital: 28310 27491 Post Office: 28310 22303/4

Taxi: 28310 24000, 25000 or 22316

Chania Airport: 28210 63264

Heraklio Airport: 2810 337311, 337211

Important Telephone Numbers in Heraklio (area code 2810)

First aid - Emergencies (EKAB): 166 or 2810 222222

Police emergency: 100 Fire emergency: 199

Hospitals:

Apollonio: 2810 229713Venizelio: 2810 237502

- University Hospital: 2810 392111

Post Office: 2810 234468 Taxi: 2810 210102, 210124

Heraklio Airport: 2810 337311, 337211

Banks

Banks are open to the public from 8:00 to 14:00. In Rethymno, most major Greek banks are situated on the main street of the city, Koundouriotou Avenue. In Heraklio, most major Greek banks are situated on 25th August Street.

Shops

Shops are open six days a week as follows: Monday, Wednesday and Saturday from 09:00 to 14:00, and Tuesday, Thursday and Friday from 09:00 to 14:00 and from 17:30 to 20:30.

Climate

The climate in Crete is generally mild.

Period	Average Temperature
January to March	I2° C
April and May	18° C
June and July	25° C
August and September	26° C
October and November	18° C
December	13° C

Transportation in Crete

Rethymno. Travel between Crete and Athens by plane takes about 45 minutes. There are two airlines and several flights a day (Olympic Airways – Tel: 0030 28310 22257, 24333 and Aegean Airlines (in Chania) – Tel: 0030 28210 63366). There is no airport in Rethymno, so visitors must come through Chania (60 km) or Heraklio (80 km). One can also travel to Rethymno from Piraeus by ferryboat. Departures are scheduled every evening from and to Piraeus by Cretan Ferries (Piraeus Office Tel: 0030 210 4176230).

The public bus service (KTEL) provides a link between most cities and villages in

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Crete. There is one bus station located on Kefalogiannidon Street (Tel: 0030 28310 22212, e-mail:http://creta-info.gr).

Students can get information, maps and travel guides from the Tourist Support Office in Rethymno (Tel: 0030 28310 29148).

Heraklio. Travel between Heraklio and Athens by plane takes about 45 minutes. There are two airlines and several flights a day (Olympic Airways – Tel: 0030 2810 288073, 285337 and Aegean Airlines – Tel: 0030 2810 330475, 222217). There are also frequent flights connecting Heraklio with other Greek cities (e.g. Thessaloniki, and Rhodes) throughout the year, as well as direct flights to European destinations for most of the year. Heraklio is linked by ferryboat to Piraeus, Thessaloniki and the Aegean Islands. Daily departures are scheduled every evening to and from Piraeus by Minoan Lines (Piraeus Office Tel: 0030 210 4118211, 4113819) or A.N.E.K. Lines (Piraeus Office Tel: 0030 210 4118611).

The public bus service (KTEL) provides a link between most cities and villages in Crete. There are two bus stations.

Heraklio Station No. I (at the port, Tel: 0030 2810 245017/19/20, fax: 0030 2810 246284) - This station has bus routes to: Chania, Rethymno, Mallia, Aghios Nicholas, Ierapetra, Lasithi, Arhanes and Aghia Pelagia.

Heraklio Station No. 2 (outside of the City Walls opposite the Chania Gate, Tel: 0030 2810 255965). This station has bus routes to: Phaistos, Aghia Gallini, Matalla, Anogia, Timpaki and Mires.

Students can get information, maps and travel guides from the Regional Tourism Authority in Heraklio (Tel: 0030 2810 246126, 246138).



PART IV: FACULTIES AND DEPARTMENTS

GENERAL STRUCTURE OF STUDIES

The University of Crete is organized into Faculties, which are composed of Departments with related disciplines. The Departments are the basic academic units of the University, and may be divided into Divisions representing a more specific area of study. The table below shows all of the Faculties and Departments of the University.

FACULTIES AND DEPARTMENTS OF THE UNIVERSITY OF CRETE								
FACUL	FACULTIES OF RETHYMNO			FACULTIES OF HERAKLIO				
FACULTY OF PHILOSOPHY	FACULTY OF EDUCATION	FACULTY OF SOCIAL SCIENCES	FACULTY OF SCIENCES AND ENGINEERING	FACULTY OF MEDICINE				
Department of Philology	Department of Primary Education Department of History	Department of Sociology	Department of Mathematics Department of Physics	Department of Medicine				
Department of History		Department of Economics	Department of Computer Science Department of Biology					
Archaeology	Department of Preschool Education	Department of Psychology	Department of Chemistry Department of					
Department of Philosophy and Social Studies		Department of Political Science	Applied Mathematics Department of Materials Science and Technology					

The governing body of every Department is the General Assembly, which is composed of all permanent faculty members, as well as student and staff representatives. Departments that have Divisions also have a General Assembly of the Division. The head of the Departmental General Assembly is the Department President, who is elected by the permanent faculty members and student and staff representatives.

The course requirements for the undergraduate degree can be completed in eight semesters in all of the Departments of the University of Crete, with the exception of the Department of Medicine in which studies can be completed in 12 semesters. The Programme of Studies of each Department lists the compulsory and elective courses, prerequisites, and all other important information relating to completion of the requirements necessary to obtain a degree from that Department.

The Academic Year

The academic year consists of two semesters: each semester contains at least 13 full-time teaching weeks. If for any reason, the number of hours that any given course is taught falls below 4/5 of the total hours programmed for that semester, the course is regarded as not having been taught. The first semester begins around the middle of September and the second semester ends around the middle of June; the exact dates are determined by the University Senate.

Academic Calendar

Winter semester: End of September - mid January

Winter semester examination period: Mid January - mid February

Spring semester: Mid February - end of May Spring semester examination period: June

Re-taking of examinations for both semesters: September

Official Holidays

28 October National Holiday
8 November (Rethymno) Local Holiday
11 November (Heraklio) Local Holiday
17 November University Holiday
December 23 - January 7 Christmas Holidays
30 January University Holiday

* Beginning of Lent

25 March National Holiday (Independence Day)

two weeks* Easter Holidays
I May Labour Day
June* Whitmonday

Examinations

There are three examination periods in the academic year: January - February, June and September. The duration of each examination period is three weeks.

During the examination period of September, the student has the right to be examined in the courses of both the winter and spring semesters, while during the examination period of June, s/he is examined only in the courses of the spring semester. During the examination period of January - February, in addition to being examined in the courses of the winter semester, a student who has passed his/her fourth year of studies at the University can also be examined in the courses in which s/he enrolled the previous spring semester.

The grade for each course is determined by the instructor, who is required to administer written and/or oral examinations and/or to base the grade on term papers or laboratory exercises. A student who fails a course offered in the winter or spring semester has the right to re-take the examination for that course again in September. If the student fails the examination in September, s/he must enrol in the course again in some subsequent semester in order to pass the course.

If a student fails any course at least four times, then following the student's application and taking into account any additional conditions that are specified by the department's internal regulations, the department's Executive Board can appoint a three-member re-examination committee in which the course instructor is required to participate.

Grading System

The grade for each course is expressed in a number from 1 to 10. The passing grade is 5. The grade point average of the degree is the average of all the grades in the courses that are required for the completion of studies. If the grade point average is 8.50 or above, the degree is awarded an "Excellent"; if it is between 6.50 and 8.49 the degree is awarded a "Very Good"; and if it is between 5 and 6.49 the degree is awarded a "Good".

^{*}The date(s) vary according to the Greek Orthodox Calendar.

Students' performance in each course is assessed as follows:

- 1. By written or oral or oral and written examination at the end of the semester
- 2. By evaluating the quality of a seminar project and class participation in the case of a seminar
- 3. Through a combination of the performance on the examinations and on written assignments during the semester

Teachers are required to submit the grades for their courses within 15 days of the end of the examination period.

ECTS

All departments of the University of Crete, apart from the newly established departments of Applied Mathematics, Political Science and Materials Science and Technology, make use of the European Credit Transfer and Accumulation System (ECTS). This system facilitates the recognition of courses taken during study abroad and thus enhances the quality and volume of student mobility in Europe.

Academic Advisors

Before the winter semester begins, the Departments appoint members of their teaching staff to serve as Academic Advisers. The role of the Academic Advisors is to inform students about any matters related to their studies, in a manner determined by the Department.





FACULTY OF PHILOSOPHY

DEPARTMENTS:

- + Philology
- + History and Archaeology
- + Philosophy and Social Studies



I. DEPARTMENT OF PHILOLOGY

Website: www.philology.uoc.gr, e-mail: philology@phl.uoc.gr

Departmental Secretariat

Tel: 0030 28310 77300/1, Fax: 0030 28310 77304

Departmental Secretary: Evangelia Kanaki

I.I BACKGROUND OF THE DEPARTMENT

The Department of Philology is located at the Rethymno campus of the University of Crete, in the area of Gallos, just outside the city of Rethymno. Ever since its foundation in 1983, the Department of Philology of the University of Crete has functioned in a way that makes it a pioneer among similar departments in Greece. In its Programme of Studies it has put emphasis on flexibility by offering students a large number of options, it established the first independent Division of Theatre and Music Studies in Greece, and it was the first Department in the country to develop Film Studies at the university level. The department currently has over 700 undergraduate students and more than 60 postgraduate students.

The Department's mission is to cultivate and promote studies within its broad subject area (Classical, Byzantine and Modern Greek Philology, Linguistics, Theatre and Music Studies) by means of academic teaching and scholarly research. Its goal is to provide its students with the essential knowledge and skills which will ensure that they are thoroughly prepared for a career in a relevant professional field. In this way it aims to make a contribution both to improving the quality of secondary education and to advancing scholarship in its area.



1.2 UNDERGRADUATE STUDIES

The basic instrument for achieving these objectives is the Department's Programme of Studies, which has been in place in its revised form since the academic year 1988-89 and is still the most flexible in Greece, with numerous options and a comparatively small number of compulsory courses. More specifically, the Programme consists of 52 courses which the student must pass in a minimum of 8 semesters, in order to obtain a degree from the Department. With regard to its structure, the Programme aims to cultivate the values of theoretical and applied knowledge as well as scholarly research, as part of the professional profile of its graduates. For this reason it comprises three different types of courses: a) Lectures (the theoretical presentation of a subject of study), b) Practical classes (the applied study of a particular subject), and c) Seminars (systematic research on a specific topic under the teacher's supervision, for the purpose of writing an academic paper).

With regard to its content, the Programme aims both to provide students with a general training in Philology and also to offer the opportunity for some basic specialization in the subject area of one of the Department's four Divisions:

1) Classical Studies (Greek and Latin), 2) Byzantine and Modern Greek Philology, 3) Linguistics, and 4) Theatre and Music Studies. The student's general training is achieved by means of a series of compulsory introductory courses in Ancient Greek, Latin, Byzantine and Modern Greek Philology, History of the Greek Language and History of the Modern Greek Theatre. Students are also required to attend compulsory courses (history, philosophy and education) in other Departments of the Faculty of Philosophy in order to broaden their areas of competence.

Basic specialization is put into practice at the beginning of the students' third semester, when they choose the Division in which they will complete the rest of their studies. In addition to the basic compulsory courses, they begin to attend the more specialized courses provided by the Department's Divisions.

1.3 DIVISIONS OF THE DEPARTMENT

1.3.1 Division of Classical Studies

The research and teaching interests of the faculty of the Division of Classical Studies cover all major areas of Classical literature, from Homer to Lucian and from Roman comedy to Apuleius, as well as the reception of the Classics. The classicists of the Department, with their books and articles in well-established periodicals and with their participation in international conferences and symposia pertaining to their special interests, are active and acknowledged members of the community of Classical Scholars at large. The areas which the Division cultivates with particular emphasis are: Greek epic and archaic lyric poetry, rhetoric, Greek tragedy, Plato, Roman comedy, Virgilian studies, Plutarch and the ancient novel. In order to promote the solid knowledge of the Classical languages as a matter of great importance, the Division has created special programmes and courses for teaching Greek and Latin.

The Workshop of Papyrology and Epigraphy (ER. P. E.)

The Workshop's primary goal is teaching and research in the fields of Papyrology and Epigraphy. The Workshop welcomes mutual collaboration with colleagues, Institutes and Universities in Greece and abroad that share common interests. Since September 2001, ER.P.E. has been housed temporarily in a relatively spacious room, close to the teaching rooms of the University of Crete. In addition to the papyrological and epigraphical holdings in the Library of the University of Crete, the Workshop houses a specialized papyrological and epigraphical library (which comprises the personal books, series, periodicals, offprints and xeroxed

articles of the Workshop's members). ER.P.E. is currently running two major projects:

a. Papyri Universitatis Cretensis

The University, through the Workshop, has been granted permission by the Ministry of Culture (25th Ephorate of Prehistoric and Classical Antiquities) to own a small papyrus collection. The collection, which is housed in the Workshop, began in 1980 with the Department's acquisition – as a result of the suggestion by B.G. Mandilaras and the support of N. Panayiotakis - of four documentary papyri, of which two are Greek from the Ptolemaic period, one is Coptic and one Arabic. It was further supplemented in 1998 by a number of papyri written in Greek and dated in the Ptolemaic period. Nikos Litinas has undertaken their restoration, digital reproduction, and publication.

b. Archive of Inscriptions of the Rethymno Prefecture The project began in 1998 and was funded for one academic year by the Research Committee of the University of Crete. It was carried out by Yannis Tzifopoulos and the then graduate students Stavroula Oikonomou and Niki Spanou, with the co-operation of the 25th Ephorate of Prehistoric and Classical Antiquities and the archaeologists Maria Andreadaki-Vlazaki, Irini Gavrilaki, Nota Karamaliki and Eva Tegou. The purpose of the project was the creation of a complete dossier of the surviving inscriptions of the Rethymno Prefecture through a systematic search on site and in the storerooms of Museums where inscriptions from the Prefecture are housed. The project was completed in 2001 and an Archive of photographs and squeezes of all the Greek, Latin and Early Christian inscriptions found within the Prefecture of Rethymno is now in the Workshop, along with an electronic database of the relevant information for each inscription.

Rethymnon Classical Studies (RethClaS)

Rethymnon Classical Studies (RethClaS) publishes the proceedings of international colloquia and conferences held in Rethymno, Crete and organized and sponsored by the Department of Philology with funds provided by the University of Crete. The series editor is Michael Paschalis, Professor of Classics in the Department of Philology. Regardless of the focus of each meeting, the approach so far has been comparative and has involved both Greek and Latin Literature. Volume 1 of RethClaS, entitled Horace and Greek Lyric Poetry, contains most of the papers presented at a colloquium with the same title which was held on May 10-11, 1999. Volume 2 will contain the proceedings of Roman and Greek Imperial Epic that was held in Rethymno on May 20-21, 2002.

Rethymnon International Conferences of the Ancient Novel (RICAN)

Every two years the Division of Classical Studies organizes the Rethymnon International Conferences of the Ancient Novel, the proceedings of which are published separately. Volume I, entitled Space in the Ancient Novel, was edited by Michael Paschalis and Stavros Frangoulidis and published in Groningen in 2002.

1.3.2 Division of Byzantine and Modern Greek Philology

The research and teaching interests of the faculty and staff of the Division of Byzantine and Modern Greek Philology cover all areas of the courses and seminars required by the Department's Programme. The Division offers courses in topics such as Byzantine religious poetry and hymnography, learned Byzantine secular literature, Byzantine historians and chroniclers, late Byzantine philology, Cretan and Heptanesian literature, the Enlightenment, and Modern Greek literature from the 19th century to the present day.

It also offers two-year postgraduate programmes (in either Byzantine or Modern Greek studies) leading to a Master's degree. The Division has a Palaeography Lab and a network site with information related to Modern Greek Studies.

46 The Palaeography Lab

The Palaeography Lab serves research and teaching needs in the fields of papyrology and codicology and also of studies in philology and in the history of Byzantium and the modern Greek world. It is already furnished with 280 microfilms and photographs of Greek manuscripts dating from the ninth to the eighteenth centuries, and several rare manuscript catalogues, as well as a microfilm reader-printer and four reader machines, and a microfilm scanner. Two doctoral theses already written and one in progress are based on material stored in the Palaeography Lab.

Logios Ermis

In collaboration with the European Society of Modern Greek Studies the Division has developed a programme with a website for all researchers of Modern Greek Literature. The name of this programme is "Logios Ermis" ("The Learned Hermes") and its website address is: http://logiosermis. phl.uoc.gr. There one can find information about: a) University Departments and Research Centres for Modern Greek Studies, and b) seminars, conferences, and lectures. Also, a Modern Greek bibliographical data bank is being prepared.

1.3.3 Division of Linguistics

The Division of Linguistics offers courses which focus on the structure of Greek, as well as courses which explore topics in theoretical linguistics from a cross-linguistic perspective. The programme is structured in the following way: (I) compulsory courses in linguistics (Introduction to Theoretical Linguistics, Introduction to the History of

Greek, Introduction to the Theory of Syntax, Modern Greek Grammar); (2) courses for further specialization in linguistics; and (3) undergraduate and postgraduate seminars in linguistics. The courses and seminars for further specialization in linguistics cover areas in theoretical and applied linguistics such as phonology, morphology, syntax, semantics, pragmatics, computational linguistics, psycholinguistics, L1 and L2 Language acquisition, and teaching of Greek as a foreign language.

The Linguistics Lab. Teaching of Greek as a Foreign Language

The mission of the Linguistics Lab is to apply technological approaches in carrying out and developing research in topics within the broad field of both theoretical and applied linguistics. It organizes courses in Modern Greek throughout the year, participates in projects on computational linguistics and publishes research and teaching texts on Modern Greek (Issues regarding the Modern Greek Language. The Teaching Approach [in Greek], 1996; Modern Greek for Beginners [in Greek], 1997 and Advanced Greek [in Greek], 1999).

1.3.4 Division of Theatre and Music Studies

With the creation of the Division of Theatre and Music Studies in 1983, classes in the history and theory of theatre, cinema and music were introduced into the Greek higher education system, at a time when the relevant departments had not yet been inaugurated. The aim of this innovation was to provide students of Greek literature with scholarly material that would widen their horizons and enable them to use new techniques in the pursuit of their studies. The Division offers courses in: the history and theory of theatre and film (Greek and international), ethnomusicology, ancient and western music, Greek traditional and popular music, and so on. Lessons are conducted with the aid of a large

collection of audio-visual recordings, while the University Library offers one of the largest collections of relevant books in the country.

The Theatre and Music Studies Lab

The Theatre and Music Studies Lab serves teaching and research needs in the fields of theatre, music and cinema. It has a recording studio with modern audiovisual equipment and possesses an extensive collection of slides, records, books and films. Over a period of years, the faculty and staff of the Department have devoted their efforts to the recording of original performances of Cretan folk musicians, in an attempt to rescue the last remnants of a dying tradition.

1.4 POSTGRADUATE STUDIES

Since 1993/94 the Department of Philology has offered a programme of postgraduate studies with specializations in Classical, Byzantine and Modern Greek Philology, in Linguistics, and in Theatre and Film Studies. The programme aims to create young scholars who will fill posts in research centres and university departments. It offers a Specialist Postgraduate Diploma (first level) and a Doctorate (second level). Students also have the opportunity to participate in research programmes. A particular advantage is the co-operation of staff and students with the Mediterranean Studies Institute, which is overseen by the Secretariat-General for Research and Technology.

1.5 FACULTY MEMBERS

Professors

 Detorakis, Theoharis, Ph.D. Byzantine Philology 1971, University of Athens.

Research interests: Byzantine hymnography; Byzantine hagiography; history of Crete.

e-mail: detorakis@phl.uoc.gr, Tel: 0030 28310 77262

 Hadjipantazis, Theodoros, Ph.D. Theatre Studies 1977, University of Thessaloniki.

Research interests: History of Greek Theatre (18th-20th centuries); folk and popular performances; the musical stage. e-mail: hadjip@phl.uoc.gr, Tel: 0030 28310 77264

 Nikolaidis, Anastasios, Ph.D. Classics 1978, King's College London.

Research interests: Plutarch and biography; Greek and Roman historiography; Greek and Roman ethics (Plato, Aristotle, Lucretius, Seneca); Latin Love Elegy (Ovid). e-mail: nikolaidis@phl.uoc.gr, Tel: 0030 28310 77261

 Paschalis, Michael, Ph.D. Classics 1980, The Ohio State University.

Research interests: Hellenistic, Augustan and early Imperial Poetry; ancient historiography; Senecan drama; the ancient novel; reception of the Classics; Modern Greek literature. e-mail: paschalis@phl.uoc.gr, Tel: 0030 28310 77260, Fax: 0030 28310 77260

 Politis, Alexis, Ph.D. Modern Greek Philology 1984, University of Thessaloniki.

Research interests: History of ideas; mentalities and literature (18th-19th centuries); history of books, libraries and reading (18th-19th centuries); Greek folk songs.

e-mail: politis@phl.uoc.gr, Tel: 0030 28310 77781

 Tsagarakis, Odysseus, Ph.D. Classics 1966, Ludwig-Maximilian Universität of Munich.

Research interests: Greek epic poetry; Greek lyric poetry. e-mail: tsagarakis@phl.uoc.gr, Tel: 0030 28310 77288

Associate Professors

 Delveroudi, Eliza-Anna, Ph.D. Modern Greek Studies 1982, University of Paris-Sorbonne (Paris IV).

Research interests: History of Modern Greek drama with

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emphasis on the 19th and 20th centuries; history of Greek cinema with emphasis on genre, directors and analysis of individual films.

e-mail: delveroudi@phl.uoc.gr, Tel: 0030 28310 77272

 Frangoulidis, Stavros, Ph.D. Classics 1990, The Ohio State University.

Research interests: Roman novel; Roman comedy; Roman historiography.

e-mail: frango@phl.uoc.gr, Tel: 0030 28310 77290

 Kaklamanis, Stefanos, Ph.D. Modern Greek Philology 1989, University of Crete.

Research interests: Later popular Byzantine literature; Cretan literature and culture in the Renaissance; the Modern Greek book (history).

e-mail: kaklamanis@phl.uoc.gr, Tel: 0030 28310 77273

 Philippides, Stamatis N., Ph.D. Classics 1984, University of California at Irvine.

Research interests: Literary semiotics; theory of literature; Modern Greek literature 1880-1950.

e-mail: philippides@phl.uoc.gr, Tel: 0030 28310 77279

 Yatromanolaki, Ioanna, Ph.D. Classics 1980, Royal Holloway College, University of London.

Research interests: Theory and praxis of rhetoric: Attic Orators, Cicero; sophistic rhetoric; philosophy of rhetoric (Aristotle's *Rhetoric*, *Ethics*, *Politics*); Greek and Latin historians.

e-mail: ioanna@phl.uoc.gr, Tel: 0030 28310 77263

Assistant Professors

 Anagnostopoulou, Elena, Ph.D. Linguistics 1994, University of Salzburg.

Research interests: Syntactic theory; comparative syntax; syntactic typology; Greek syntax; argument structure and

the lexicon; binding theory; clitics; clause structure; tense and aspect.

e-mail: elena@phl.uoc.gr, Tel: 0030 28310 77277

Athanassaki, Lucia, Ph.D. Classics 1990, Brown University.
 Research interests: Greek and Roman lyric poetry; Greek tragedy.

e-mail: athanassaki@phl.uoc.gr, Tel: 0030 28310 77286

 Dounia, Christina, Ph.D. Modern Greek Philology 1988, University of Thessaloniki.

Research interests: Modern poetry and prose of the 19^{th} and 20^{th} centuries; criticism; cultural studies.

e-mail: dounia@phl.uoc.gr, Tel: 0030 28310 77271

 Kalokairinos, Alexis, Ph.D. Linguistics 1993, École des Hautes Etudes en Sciences Sociales, Paris.

Research interests: Pragmatics; literary theory; philosophy of language.

e-mail: alexis@phl.uoc.gr, Tel: 0030 28310 77274

 Kappa, Ioanna, Ph.D. Linguistics 1995, University of Salzburg.

Research interests: Phonology; optimality theory; first language acquisition/phonological development; phonology of Greek/Greek dialects; language contact; language change; morphophonology.

e-mail: kastrinaki@phl.uoc.gr, Tel: 0030 28310 77285

 Kastrinaki, Angela, Ph.D. Modern Greek Philology 1994, University of Thessaloniki.

Research interests: Modern Greek literature of the 19^{th} and 20^{th} centuries; comparative literature.

e-mail: kastrinaki@phl.uoc.gr, Tel: 0030 28310 77285

 Katsimali, Georgia, Ph.D. Linguistics 1990, University of Reading.

Research interests: Structure of Modern Greek; diachronic syntax; applied linguistics with reference to the teaching of

Greek as a mother, second and foreign language. e-mail: katsimali@phl.uoc.gr, Tel: 0030 28310 77275

 Loukaki, Marina, Ph.D. Byzantine Philology 1989, University of Paris I-Pantheon Sorbonne.

Research interests: Byzantine rhetoric; edition of texts. e-mail: loukaki@phl.uoc.gr, Tel: 0030 28310 77280

 Peponi, Anastasia-Erasmia, Ph.D. Classics 1992, University of Thessaloniki.

Research interests: Archaic poetry and performance; lyric qualities in poetry and painting; philosophy as discourse; aesthetics in Ancient Greece; education in Ancient Greece. e-mail: peponi@phl.uoc.gr, Tel: 0030 28310 77283

 Tzifopoulos, Yannis, Ph.D. Classics 1991, The Ohio State University.

Research interests: Greek and Latin epigraphy; historiography; Greek comedy and lambos; Pausanias and the Second Sophistic; Greek, Latin and Modern Greek paroemiology. e-mail: tzif@phl.uoc.gr, Tel: 0030 28310 77291

 Vassis, Ioannis, Ph.D. Byzantine Philology 1987, University of Hamburg.

Research interests: Byzantine poetry; Byzantine school texts; edition of Byzantine texts.

e-mail: vassis@phl.uoc.gr, Tel: 0030 28310 77282

Lecturers

 Detoraki, Marina, Ph.D. Byzantine Philology 2000, University of Paris-Sorbonne (Paris IV).

Research interests: Hagiography; monastic literature; edition of texts.

e-mail: detoraki@phl.uoc.gr, Tel: 0030 28310 77295

• Glytzouris, Antonis, Ph.D. Theatre Studies 1998, University of Crete.

Research interests: History and theory of European Theatre; history of Modern Greek Theatre (19th & 20th centuries);

stage direction.

e-mail: glytzouris@phl.uoc.gr, Tel: 0030 28310 77281

 Hapsoulas, Anastasios, Ph.D. Ethnomusicology 1997, University of Göttingen.

Research interests: Ancient Greek music; historical development of Greek traditional music; music traditions of Southeastern Europe in relation to the Western Middle Ages. e-mail: hapsoulas@phl.uoc.gr, Tel: 0030 28310 77276

 Kavoulaki, Athina, Ph.D. Classics 1996, University of Oxford.

Research interests: Greek tragedy; Greek comedy; Greek religion.

e-mail: kavoulaki@phl.uoc.gr, Tel: 0030 28310 77267

Specialized Teaching Staff

Aretoulakis, Manolis, B.A. University of Athens, M.A.
 1996 in English and American Literature, University of Illinois.
 Research interests: English literature and culture, literary theory.

e-mail: aretoulakis@phl.uoc.gr, Tel: 0030 28310 77297

 Poulopoulou, Maria, M.A. 1996 in Philology, University of Crete.

Research interests: Modern Greek as a foreign language. e-mail: poulopoulou@phl.uoc.gr, Tel: 0030 28310 77278

 Theodoraki, Despina, Ph.D. 1986 in Comparative Literature, University of Paris III Sorbonne Nouvelle.
 Research interests: French language and literature.

Tel: 0030 28310 77298

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

1.6 FACILITIES

The Department of Philology has modern seminars rooms and amphitheatres for its practical classes, seminars and lectures, with all the necessary equipment. In addition, the Department has four laboratories attached to their respective Divisions. The University Library, to which all students have access with lending rights, has one of the largest collections of books in Greece and an exceptionally rich collection of scholarly journals. There is also a computer laboratory for students to use as an information, training and communication resource. The Department recently acquired a technologically advanced microfilm, paper and slide scanner.

1.7 COLLABORATION WITH UNIVERSITIES IN OTHER COUNTRIES

In the course of their studies, students have the opportunity to attend courses in corresponding subjects at foreign universities, under the Socrates-Erasmus Programme. The Department of Philology participates in several interuniversity programmes through which it cooperates with various European university departments. Also, under the auspices of the Division of Byzantine and Modern Greek Philology, the Logios Ermis website has been created to function as an information bank on research and teaching in Modern Greek studies throughout the world.

1.8 CAREER OPPORTUNITIES FOR GRADUATES

Graduates of the Department of Philology can find employment:

- o in libraries and archives
- o at newspapers and periodicals
- o in publishing companies and organizations
- o in public service

- in work related to their field of competence in the publishing area (as translators and editors, linguists, editorial consultants, writers of materials for language and literature courses at various educational levels) and in the press
- o as teachers of language and literature in secondary education (both public and private)
- o as teachers of Greek as a foreign language
- as teachers or instructors in various educational institutions (such as professional training institutes and centres, the national employment organization, colleges of studies in tourism, military academies, police academies, nursing colleges)
- in programmes organized by regional education extension committees to teach Greek in literacy courses and to socially marginalized groups
- o in research centres
- o in theatrical organizations and in the mass media.



2. DEPARTMENT OF HISTORY AND ARCHAEOLOGY

Website: www.uoc.gr/Tmhmata/RETHYMNO/AH

Departmental Secretariat

Tel: 0030 28310 77337, Fax: 0030 28310 77338

Departmental Secretary: Evlavia Dragasi

2.1 BACKGROUND OF THE DEPARTMENT

The Department of History and Archaeology of the University of Crete is based at the Rethymno campus, which is located just outside the city of Rethymno in Gallos. It provides teaching in history and archaeology with emphasis on methodology; its members are also active in research. The Department admitted its first students as an independent department in September 1983. It currently has about 650 undergraduate and 275 postgraduate students. At the undergraduate level, the ratio of teaching staff to students is 1:22.

The academic staff is composed of around 30 scholars, who belong to one of the four Divisions that make up the department. These are as follows:

- I. Division of Ancient and Medieval History
- 2. Division of Modern and Contemporary History
- 3. Division of Oriental and African Studies
- 4. Division of Archaeology and Art History

All Divisions of the Department organize educational visits and expeditions to museums, archaeological and historical sites, as well as to archives, both in Greece and abroad, so as to bring students in direct contact with the material that they have studied in the course of the academic year, and to provide some research experience. The highlight



of these occasions is the annual educational excursion, alternately to destinations within Greece and abroad. "Hestia" also takes place annually and has become one of the department's treasured institutions. Members of the academic staff and students retreat during a weekend in May to a Cretan town or village and take part in lectures, debates, visits to sites of archaeological and historical interest and, of course, fun!

2.2 UNDERGRADUATE STUDIES

The Department is widely-known in Greece for its demanding, innovative and rewarding curriculum, which is built around the idea of allowing students a free choice among dozens of subjects available each semester. The only constraint to free choice is that the student is required to accumulate a certain number of credits in specific fields depending on the degree programme s/he has decided to follow.

The minimum period of study is eight semesters, that is, four years. To obtain the degree in History and Archaeology

with a specialization in Ancient and Medieval History, Modern and Contemporary History, or Archaeology, one has to successfully complete a study programme of 52 courses (that is, an average of about 6 courses per semester) in one of the three programmes available:

- Ancient and Medieval History (Degree Programme AI). It is focused on Ancient, Byzantine and European Medieval History.
- Modern and Contemporary History (Degree Programme A2). It is aimed at training students to adopt a scholarly approach to the history of modern Greek society in relation to worldwide developments from the Renaissance onwards.
- Archaeology (Degree Programme B). Its purpose is to familiarize students with the study of the material remnants of past civilizations from Prehistory to the Middle Ages, and also with the history of art from antiquity to the present day.

The requirements of each Degree Programme are shown below.

Degree Programme AI: Ancient and Medieval History

	Courses
Ancient Greek Thematography and Ancient Greek Philology	4
(of which one compulsory course in Thematography and one in Ancient Greek Philology)	
Latin	2
Pedagogics (of which one compulsory course involving teaching practice)	3
Modern Greek Philology	2
Ancient History	5
Byzantine History	3
Medieval History	3
Modern and Contemporary History	4
Arab, African and/or Turkish Studies	2
Any History Course	2

Prehistoric, Classical, and Byzantine Archaeology (not all in the same subject)	4
History of Art (compulsory to take one in History of European Art)	2
Free Choice	6
Foreign Language	4
Seminars (three in Ancient, Byzantine or Medieval History [but not all three in the same subject], one in Archaeology or Ancient Greek Philology, one in any History, one free choice)	6
Total number of courses (each course is completed in one semester)	52

Degree Programme A2: Modern and Contemporary History

	Courses
Modern and Contemporary History (it is strongly recommended that four	•
introductory courses be taken in the first four semesters)	9
Ancient or Byzantine or Medieval History (compulsory to take at least one course in each)	5
Arab, African and/or Turkish Studies (compulsory to take at least one course in each)	3
Any History	3
Art History	3
Sociology/Philosophy	3
Philology (compulsory to take at least two courses in Modern Greek Philology)	7
Archaeology (Prehistoric, Classical or Byzantine)	I
Free Choice	5
Seminars (one in Ancient, Byzantine or Medieval History, four in Modern and	
Contemporary History, one in any History)	6
Pedagogics or Teaching Practice / Free Choice (students may choose not	3
to take any course in Pedagogics; at least one of their free choices must be in History)	
Foreign Language	4
Total number of courses (each course is completed in one semester)	52

Degree Programme B: Archaeology

	Courses
Ancient Greek Thematography	2
Ancient Greek and/or Byzantine Philology	3
Latin	2
Modern Greek Philology	2
Pedagogics (of which one or both may involve teaching practice)	2
Ancient History	2
Byzantine and/or Medieval History	2
Modern and Contemporary History	2
Any History (including courses offered by the Division of Oriental and African Studies)	2
i) Prehistoric, Classical and Byzantine Archaeology (minimum requirement: five courses in each [including one seminar in each]; one more seminar must be in Prehistoric, Classical and Byzantine Archaeology or in Art History and one in any History or Archaeology or Art History subject)	18
ii) Art History (at least three courses in European Art and one seminar)	6
Free Choice	5
Foreign Language	4
Total number of courses (each course is completed in one semester)	52

Students are also required to participate in excavations, surveys or other such activities organized by the Division of Archaeology and Art History for at least four weeks in the course of their studies.

NOTE: Courses in Ancient Greek Thematography, Ancient Greek Philology, Latin, Byzantine Philology and Modern Greek Philology are offered by the Department of Philology. Courses in Sociology and Philosophy are offered by the Department of Philosophy and Social Studies.

Courses in Sociology are offered by the Department of Sociology.

Courses are offered in two forms:

- Series of lectures: These are courses whose aim is to acquaint students with a wide subject area or topic. Students' performance is assessed through oral or written examination at the end of each semester. Those who fail the examination are given a second opportunity, which is their final for the specific course.
- Seminars: These require the active participation of students, who are obliged to study a specific topic under the supervision of one of the faculty members.
 Each student must present a paper orally on his/her subject of choice and then write an essay about it.

2.3 POSTGRADUATE STUDIES

The Department of History and Archaeology of the University of Crete was the first such department in Greece to offer its students well-structured and organized postgraduate study programmes in Classical Archaeology, Art History, Modern and Contemporary History and Turkish Studies.

The Department offers two types of postgraduate degrees: I) A first-cycle postgraduate degree (equivalent to a Master's Degree), and 2) A doctoral degree (Ph.D.). The following postgraduate programmes are currently offered by the Department:

- □ Ancient Greek World: History and Archaeology
 - o Classical Archaeology
 - o Ancient History
 - o Prehistoric Archaeology
- □ Art History
- □ Turkish Studies

Interdisciplinary postgraduate programmes:

□ Contemporary Greek and European History

- Byzantine Studies
 - o Byzantine History
 - o Byzantine Archaeology and Art History
 - o Byzantine Philology
- Advanced Methods and Information Systems in Archaeology: Research and Management of the Material Remnants of Aegean Civilizations

All holders of degrees in the Humanities or Social Sciences from any Greek or foreign university are eligible to apply for admission to a first-cycle postgraduate programme. Selection is made on the basis of written and oral examinations and interviews. Good command of a foreign language is an absolute prerequisite for admission to a first-cycle postgraduate programme. Exams are held each year during the last ten days of February and/or September. Details about entry exams and the number of places available are advertised by the beginning of December for the spring semester and by the beginning of May for the winter semester.

The minimum requirement for obtaining a first-cycle postgraduate degree is to successfully complete four seminars (six in Turkish Studies) and to write and defend a final dissertation. However, certain programmes have more requirements, such as participation in research activities.

The duration of the first-cycle postgraduate programme is 4-6 semesters, but can be prolonged by decision of the General Assembly of the Department. The successful completion of the study programme leads to the first-cycle postgraduate degree, which suggests specialization in one of the subject areas specified by the Department.

The second cycle of postgraduate studies aims to develop scholars able to conduct research in the humanities, and leads to the doctoral degree (Ph.D.). The first-cycle postgraduate degree or its equivalent is a prerequisite for students to be admitted as doctoral candidates.

The student proposes the subject of his/her Ph.D. thesis to the General Assembly (G.A.) of the Department after having obtained the consent of one of the faculty members. The G.A. appoints the student's supervisor and two other members of the academic staff who specialize in the field, in order to help with the supervision of the student. When completed, the thesis is defended before the Examining Committee and the G.A. The thesis has to be ready six semesters after its topic was approved, but it is possible to be granted permission to defer submission.

2.4 FACULTY MEMBERS

Professors

 Hadjinicolaou, Nicos, Docteur ès Lettres et Sciences Humaines 1980, Ecole des Hautes Etudes en Sciences Sociales, Paris.

Research interests: Italian Renaissance; El Greco; Goya; 18th and 19th century European Art; Greek painting of the 19th and 20th centuries.

Tel: 0030 28310 77361

 Hadziiosif, Christos, Ph.D. 1981, Ecole Pratique des Hautes Etudes - Paris IV.

Research interests: Economic and social history of the Mediterranean and Greek region (18th – 19th centuries); Greek shipping and commerce; history of industry; political and economic developments in the inter-war period; the German Occupation and the post-war period in Greece. e-mail: synasos@phl.uoc.gr, Tel: 0030 28310 77362

• Kalpaxis, Thanasis, Ph.D. 1971, University of Heidelberg. Research interests: The history of ancient Greek architecture; the history of archaeology as a discipline. e-mail: kalpaxis@phl.uoc.gr, Tel: 0030 28310 77351

Loukos, Christos, Ph.D. 1984, University of Athens.
 Research interests: The Greek Revolution of 1821; social issues of Modern Greek cities; issues of the history of the

Greek State; introduction to the history of Latin America. e-mail: loukos@phl.uoc.gr, Tel: 0030 28310 77358

• Stampolidis, Nicholas Chr., Ph.D. 1982, Aristotle University of Thessaloniki.

Research interests: Inter-relations between the Mediterranean peoples in the early Iron Age; Homeric archaeology; Geometric and Archaic periods; Hellenistic sculpture and architecture.

Tel: 0030 28310 77339, 0030 210 7228321

 Themelis, Petros G., Ph.D. 1976, Ludwig-Maximilians Universitaet Muenchen.

e-mail: pthemelis@hotmail.com, Tel: 0030 28310 77340, 0030 210 3310137

Associate Professors

 Avdela, Efi, Diplome de Doctorat 1989, Université Paris 7-Jussieu.

Research interests: Social and cultural history in post-war years.

e-mail: efiavdela@phl.uoc.gr, Tel: 0030 28310 77344

 Gratziou, Olga, Ph.D. 1979, Universitaet Heidelberg.
 Research interests: Greek illuminated Manuscripts after the invention of typography; Postbyzantine Art; Art in Greece during the Venetian period; the reception of Byzantine Art in Modern Greece.

e-mail: gratsiou@phl.uoc.gr, Tel: 0030 28310 77363

 Kopaka, Katerina, Ph.D. 1984, University of Paris I (Sorbonne).

Research interests: Domestic architecture and everyday life; gender studies; ancient technologies; island cultures;

the history of archaeological research on the island of Crete in the 3rd and 2nd millennia B.C.

e-mail: kopaka@phl.uoc.gr, Tel: 0030 28310 77346

 Tzachili, Iris, Ph.D. 1990, National and Kapodistrian University of Athens.

Research interests: Minoan Archaeology; prehistoric textiles; history of archaeology.

e-mail: tzachili@phl.uoc.gr, Tel: 0030 28310 77364

Assistant Professors

• Galanidou, Nena, Ph.D. 1996, University of Cambridge. Research interests: Palaeolithic and Mesolithic archaeology; prehistoric technology; settlement archaeology; ethnoarchaeology; visual representation of the past; archaeological computing; gender archaeology; history of archaeology.

e-mail: ngalanidou@phl.uoc.gr, Tel: 0030 28310 77343

Kasdagli, Aglaia E., Ph.D. 1991, University of Birmingham.
 Research interests: Comparative and interdisciplinary approaches to various aspects of economic and social history, concerning both western Europe and the Greek world during the medieval and early modern period; and a special interest in agrarian history, inheritance systems and the history of the family.

e-mail: kasdagli@phl.uoc.gr, Tel: 0030 28310 77348

 Kioussopoulou, Antonia, Ph.D. 1988, University of Crete.

Research interests: Social history of Byzantium from 13th to 15th centuries.

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 Matthiopoulos, Eugene D., Ph.D. 1997, University of Crete.

e-mail: matthiopoulos@phl.uoc.gr, Tel: 0030 28310 77367

- Missiou, Anna, Ph.D. 1986, University of Cambridge. Research interests: Athenian democracy; gender issues; ancient and modern conceptions of the relationships between Greeks and other peoples of the Eastern Mediterranean. e-mail: missiou@phl.uoc.gr, Tel: 0030 28310 77360
- Petmezas, Socrates D., Ph.D. 1989, Ecole des Hautes Etudes en Sciences Sociales, Paris.

Research interests: History of the Greek agricultural economy (18th-20th centuries); the proto-industrialization of the Ottoman Empire (18th-19th centuries); the historical geography of the Balkans (17th-20th centuries); the formation of the Greek national ideology (18th-20th centuries). e-mail: petmezas@phl.uoc.gr, Tel: 0030 28310 77366

Lecturers

 Anastasopoulos, Antonis, Ph.D. 1999, University of Cambridge.

Research interests: Ottoman institutions; the organization and functioning of provincial societies with emphasis on the eighteenth century; the inscriptions of the Islamic tombstones of the Ottoman period.

e-mail: anastasopoulos@phl.uoc.gr, Tel: 0030 28310 77368

- Kyritses, Demetrios, Ph.D. 1997, Harvard University. Research interests: The social and economic history of the Byzantine Empire from the eleventh to the fifteenth centuries. e-mail: kyritses@phl.uoc.gr, Tel: 0030 28310 77353
- Serghidou, Anastasia, Ph.D. 1997, Ecole des Hautes Etudes en Sciences Sociales, Paris.

Research interests: Cultural expression of political issues; women and gender studies; affective history; and Classical reception.

e-mail: serghidou@phl.uoc.gr, Tel: 0030 28310 77352

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Specialized Teaching Staff

 Aksou-Aivali, Gulsun, M.A. 1979 in Translation and Interpretation, University of Graz.

Research interests: Turkish language.

• Genaraki, Amalia, B.A. University of Athens, M.A. 1988 in the Theory and Practice in School Education, University of Geneva.

Research interests: English for the Humanities, English for Religious Studies.

e-mail: genaraki@phl.uoc.gr, Tel: 0030 28310 77297

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

2.5 FACILITIES

The Department owns several computers and overhead projectors, video and audio equipment, microfilm and microfiche readers/printers as well as other equipment available to its staff and students in its lecture and seminar rooms and in its laboratories. The Department also owns a rich and ever-expanding collection of transparencies which are used for teaching purposes.

The Division of Archaeology and Art History has a building situated in the old town of Rethymno which is referred to as the "House of the Division of Archaeology and Art History". It is an attractive, restored building, which houses the restoration laboratory for the archaeological findings of the excavations conducted by the department. It also has two lecture rooms which are used for seminars, lectures by invited speakers, conferences and other events. The House is located at Patriarchou Grigoriou and Patelarou Streets in Rethymno.

Several members of the academic staff of the department run and participate in research projects which are carried out at the Institute for Mediterranean Studies (I.M.S.) in Rethymno. I.M.S. is one of the research units of the Foundation for Research and Technology - Hellas (F.O.R.T.H.) and focuses on research in the humanities. The Institute is housed in a restored building in the old town of Rethymno and provides an excellent environment for research with its high-tech equipment and its library. The Institute for Mediterranean Studies is located at 130 Nikiphorou Phoka Street in Rethymno (tel: 0030 28310 25146, fax: 0030 28310 25810).

The Division of Archaeology and Art History conducts excavations at several sites in Crete, notably Eleutherna (photo p. 62). Eleutherna is the site of an ancient Greek city of the Archaic period, which survived through the Roman and Byzantine periods till the beginning of the Venetian rule in the early thirteenth century. All students of the Division are entitled to participate in these excavations during their summer holidays, and thus gain significant archaeological experience.

2.6 COLLABORATION WITH UNIVERSITIES IN OTHER COUNTRIES

The Department is very active in student-exchange programmes, sending students abroad and welcoming students from foreign universities, since it appreciates the benefits of scholarly mobility. Students of the Department of History and Archaeology have, in recent years, spent a semester or a year abroad in such institutions as the University of Paris I Sorbonne, the University of Paris X Nanterre, the University of Provence, the University of Sheffield, the University of Edinburgh, the University of Frankfurt-am-Main, Göteborg University, Saarland University in Saarbruecken and many more.

3. DEPARTMENT OF PHILOSOPHY AND SOCIAL STUDIES

Website: www.uoc.gr/Tmhmata/RETHYMNO/PHILOSOFY/index.htm

Departmental Secretariat

Tel: 0030 28310 77215/6, Fax: 0030 28310 77222

Departmental Secretary: Angeliki Vavouraki

3.1 BACKROUND OF THE DEPARTMENT

The Department of Philosophy and Social Studies, located at the Rethymno campus in Gallos, is one of the oldest departments of the University of Crete; it has been operating since 1977. It is organized in two Divisions corresponding to two major areas of study: Philosophy, and Theory and Methodology of Social Sciences. The curriculum combines philosophy with psychology, sociology, cultural anthropology and education in order to shed light on some of the most fundamental questions in the study of human nature and society. The above disciplines are studied from an integrative perspective.

The B.A. degree represents a variety of disciplines related to the above major areas of specialization as well as practical teacher training for those who wish to pursue a teaching career in Secondary Education. In the first two years the studies are broadly based, allowing the students to choose among a variety of disciplines, thus developing their ability to address problems from a number of different standpoints. At the end of their second year of study, students have to choose their major area of interest, ie. Philosophy or Theory and Methodology of Social Sciences. At the same time, they are allowed to take optional courses that give them the opportunity to develop academic



specialization in the emerging intersections among disciplines, acquiring new knowledge in response to the demand for new competencies.

The Department currently has about 680 undergraduate students and more than 50 postgraduate students.

3.2 UNDERGRADUATE STUDIES

The undergraduate Programme of Studies consists of 52 courses which the student must pass in a minimum of 8 semesters, in order to obtain a degree from the Department. With regard to its structure, the Programme is designed to cultivate the values of theoretical and applied knowledge, as well as scholarly research, as part of the professional profile of its graduates. For this reason it comprises two different types of courses: a) Lectures (the theoretical presentation of a subject of study), and b) Seminars (systematic research on a specific topic under the professor's supervision, for the purpose of writing an academic paper).

The students' general training is achieved by means of the following compulsory introductory courses: Introduction to Philosophy, Philosophy of Science, Logic, Moral Philosophy, Political and Social Philosophy, Ancient Greek Philosophy, Modern Philosophy, Social Theory, Introduction to Sociology, History and Philosophy of Social Sciences, Sociology of Education, Introduction to Psychology I and II, and Methodology of Teaching. Students are also required to attend compulsory courses (history, philology) in other Departments of the Faculty of Philosophy in order to broaden their areas of competence.

Basic specialization is put into practice at the beginning of the students' fifth semester, when they choose the Division in which they will complete the rest of their studies. In addition to the basic compulsory courses, they begin to attend the more specialized optional courses provided by the Department's Divisions. They can also follow optional

courses in disciplines taught in other Departments of the University.

3.3 POSTGRADUATE STUDIES

The Department offers a postgraduate programme in Philosophy that was introduced in the academic year 1993-94. The programme, entitled "Philosophy: Science, Values and Society," was modified in 2001 and is funded by the E.U. This programme has two main areas of concentration: Ancient and Byzantine Philosophy, and Modern and Contemporary Philosophy.

Starting in September 2003 a joint postgraduate programme in Bioethics will be in effect. This programme, which is also funded by the E.U., was organized in collaboration with the Departments of Biology, Medicine and Sociology of the University of Crete and is the first of its kind in Greece. It aims at the examination of methodological and epistemological problems in Bioethics, as well as the investigation of practical issues in Medicine and biological research.

The postgraduate study programmes award:

- a) a Master's Degree in the areas of Philosophy and Bioethics to those who successfully complete their postgraduate studies and write a Master's dissertation, and
- b) a Ph.D. to those who successfully write and defend a doctoral thesis. A Master's Degree from a Greek university or a university abroad is an essential qualification for enrolment in a Ph.D. programme.

3.4 FACULTY MEMBERS

Professors

Kalfas, Vassilis (Division of Philosophy), Ph.D. 1984,
 Aristotle University of Thessaloniki.

Research interests: Ancient philosophy; philosophy of science.

e-mail: kalfas@phl.uoc.gr, Tel: 0030 28310 77212

 Kugiumutzakis, Giannis (Division of Theory and Methodology of Social Sciences), Ph.D. 1985, University of Uppsala.

Research interests: Infant development - infant imitation; non verbal communication; infant math and musical abilities; communication between twins during infancy; dyadic and triadic communication in infancy; imaginary and real companions from 3-6 years; epistemology of psychology; interdisciplinary approaches of human mind and ancient Greek Psychology.

e-mail: gkugium@phl.uoc.gr, Tel: 0030 28310 77238

Associate Professors

 Georgoulas, Antonios (Division of Theory and Methodology of Social Sciences), Ph.D. 1990, Université des Sciences Humaines de Strasbourg.

Research interests: Sociology; cultural anthropology. e-mail: georgoul@phl.uoc.gr, Tel: 0030 28310 77226

Hadgopoulos, Demetrius John (Division of Philosophy),
 Ph.D. 1974, Wayne State University, Michigan.

Research interests: Logic, philosophy of art, ancient philosophy.

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 Lebedev, Andreas (Division of Philosophy), Ph.D. 1979, University of Moscow.

Research interests: Ancient philosophy. e-mail: lebedev@phl.uoc.gr, Tel: 0030 28310 77207

Maragos, George (Division of Philosophy), Ph.D. 1981,
 Université de Provence (Aix Marseille I).

Research interests: Philosophy of science; philosophy of the mind; cognitive science.

Tel: 0030 28310 77225

· Nikolakakis, Georgios (Division of Theory and

Methodology of Social Sciences), Ph.D. 1981, Université Paris X – Nanterre.

Research interests: Cultural anthropology; film studies; hermeneutics.

e-mail: nikolakakis@phl.uoc.gr

- Pigiaki, Kalliopi (Division of Theory and Methodology of Social Sciences), Ph.D. 1987, University of Southampton.
 Research interests: Educational theory; educational reform and policies; educational practice; critical pedagogy and qualitative research methodology.
- e-mail: pigiaki@phl.uoc.gr, Tel: 0030 28310 77213
- Roussopoulos, George (Division of Philosophy), Ph.D.
 1987, University of Ioannina.

Research interests: Epistemology; philosophy of science; philosophy of mathematics.

e-mail: roussop@phl.uoc.gr, Tel: 0030 28310 77203

Tsinorema, Stavroula (Division of Philosophy), Ph.D.
 1983, University of Exeter.

Research interests: Moral and social philosophy; epistemology; philosophy of language; theories of rationality; science and values.

e-mail: tsinorema@phl.uoc.gr, Tel: 0030 28310 77218, 77236

Assistant Professors

- Androulidakis, Konstantinos (Division of Philosophy),
 Ph.D. 1989, Ludwig Maximilians Universitat Munchen.
 Research interests: Kant; German Idealism; theory of reason and rationality; philosophy of literature.
 e-mail: androulidakis@phl.uoc.gr, Tel: 0030 28310 77205
- Astrinakis, Antonios E. (Division of Theory and Methodology of Social Sciences), Ph.D. 1991, Panteion University, Athens.

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Research interests: Sociology of culture and deviance; sociological perspective of social psychology; social construction of emotions.

e-mail: astrinak@phl.uoc.gr, Tel: 0030 28310 77201

Kavoulakos, Konstantinos (Division of Philosophy),
 Ph.D. 1995, Panteion University, Athens.

Research interests: Social and political philosophy; theories of democracy; critical theory; hermeneutics.

e-mail: kavoulakos@phl.uoc.gr, Tel: 0030 28310 77228

 Kyrkouli, Stavroula (Division of Theory and Methodology of Social Sciences), Ph.D. 1989, University of New York.
 Research interests: Neuropsychology: peptide-transmitter interactions in feeding behaviour; role of peptides in nutrient choice; animal models of anorexia nervosa.

e-mail: kyrkouli@phl.uoc.gr, Tel: 0030 28310 77214

 Palios, Zacharias (Division of Theory and Methodology of Social Sciences), Ph.D. 1986, University College, Cardiff.
 Research interests: Sociology of education; sociology of the teaching profession with emphasis on the academics; adult education.

e-mail: palios@phl.uoc.gr, Tel: 0030 28310 77213

 Panayiotopoulos, Nikos (Division of Theory and Methodology of Social Sciences), Ph.D. 1995, Université des Sciences Humaines de Strasbourg II.

Research interests: Sociology of education; deviation; social transformation; state; international systems of domination and culture; sociological theory.

e-mail: panagiot@phl.uoc.gr, Tel: 0030 28310 77200

Venieri, Maria (Division of Philosophy), Ph.D. 1989,
 Ludwig – Maximilians – Universitat Munchen.

Research interests: Wittgenstein; philosophy of language; philosophy of the mind; epistemology.

e-mail: venieri@phl.uoc.gr, Tel: 0030 28310 77219

Zografidis, George (Division of Philosophy), Ph.D.
 1992, Aristotle University of Thessaloniki.

Research interests: Patristic and Byzantine philosophy; later Greek philosophy; philosophy of religion; philosophy of art.

e-mail: zograf@phl.uoc.gr, Tel: 0030 28310 77204

Lecturers

 Karakatsani, Despina (Division of Theory and Methodology of Social Sciences), Ph.D. 1998, Université Vincennes Saint-Denis (Paris VIII).

Research interests: History of educational practices and cultural history of education.

e-mail: despikar@phl.uoc.gr, Tel: 0030 28310 77231

 Molivas, Gregory (Division of Philosophy), Ph.D. 1994, University College London.

Research interests: Political and moral philosophy; theories of rights and justice; utilitarianism.

e-mail: molivas@phl.uoc.gr, Tel: 0030 28310 77217

 Stamatopoulou, Despina (Division of Theory and Methodology of Social Sciences), Ph.D. 1994, University of Bristol.

Research interests: Creativity; psychology of art; aesthetic development; visual symbolization; the psychology of self (self-concept); psychology of emotions.

e-mail: stamatop@phl.uoc.gr, Tel: 0030 28310 77232

Specialized Teaching Staff

• Gianakodimou, Eleni, D.E.A. 1984 in French and Italian Comparative Literature, University of Paris VIII.

Research interests: Italian language and literature.

Tel: 0030 28310 77298

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

3.5 FACILITIES

The Department of Philosophy and Social Studies has four laboratories:

- The Philosophical Research and Translation Lab
- The Sociology Lab
- The Psychology Lab
- The Practical Teaching Lab

There is also a computer laboratory for students to use as an information, training and communication resource. In addition, the University Library, to which all students have access with lending rights, has one of the largest collections of books in Greece and an exceptionally rich collection of scholarly journals and inter-loan facilities.

3.6 COLLABORATION WITH UNIVERSITIES IN OTHER COUNTRIES

In the course of their studies students have the opportunity to attend courses in corresponding subjects at foreign universities, under the Socrates-Erasmus Programme. The Department of Philosophy and Social Studies participates in several inter-university programmes through which it cooperates with similar departments at various European universities.

3.7 CAREER OPPORTUNITIES FOR GRADUATES

Graduates of the Department of Philosophy and Social Studies can find employment:

- in Secondary Education in a variety of areas (Philosophy, Psychology, Sociology, History, and Literature)
- at newspapers and periodicals
- o in publishing companies and organizations
- o in public service
- o in research centres related to their field of specialized competence (i.e. social research)
- as teachers or instructors in various educational institutions (such as professional training institutes and centres, the national employment organization, colleges of studies in tourism, military academies, police academies, nursing colleges)
- o in mass media





FACULTY OF EDUCATION

DEPARTMENTS:

- **→ Primary Education**
- **→ Preschool Education**



4. DEPARTMENT OF PRIMARY EDUCATION

Departmental Secretariat

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e-mail: emount@edc.uoc.gr

Departmental Secretary: Eleni Moundaki

4.1 BACKGROUND OF THE DEPARTMENT

The Department of Primary Education of the University of Crete began functioning in the academic year 1984-85. The Faculty of Education was established in 1995. The Department currently has 714 undergraduate students and 132 postgraduate students.

The aims of the Department are to:

- Develop and advance the pedagogical sciences through educational research and teacher training.
- Instill in its graduates the appropriate academic and scientific orientation necessary to their profession.
- Improve the level of education based on the constantly increasing needs in the field.
- Participate in the search for solutions to educational problems.

The Department's move to the new University Campus in Rethymno at Gallos several years ago was a turning point in its development. The facilities now available at the University Campus have provided the Department with new buildings, state-of-the-art equipment and modern rooms for teaching purposes, meetings, seminars and laboratories. Because of the rapid growth of the Department – both students and staff - and the needs which this constant



development creates, additional facilities are anticipated in the near future within the framework of the overall plans for growth of the University of Crete at Rethymno, with respect to new classrooms, offices and laboratories.

A number of the faculty members of the Department have played a determining role in the development of the Department and its present configuration. The Department has worked cooperatively with both the academic community of other universities in Greece and also with foreign universities. It has also made a significant contribution to the educational community of Crete.

4.2 UNDERGRADUATE STUDIES

The courses offered by the Department are divided into two cycles, and the courses of each cycle are divided into five subject areas. The first cycle, the Instructional cycle, includes courses in the following subject areas:

- 1. Modern Greek Language and Literature
- 2. Sciences
- 3. Humanities and Social Sciences
- 4. Aesthetic Education
- 5. Special Education and Learning Disorders The second cycle, the Pedagogical cycle, includes courses in the following subject areas:
- I. History and Sociology of Education
- 2. Inter-cultural and Comparative Education
- 3. Educational Psychology and Psychopedagogical Research
- 4. Instructional Methodology and Evaluation in Education
- Educational Technology and Use of Educational Software Packages

In order to obtain the undergraduate degree from the Department, a student must successfully complete 49 courses (of a three- or six-hour per week duration) and write and publicly defend a senior year dissertation.

The education of the students includes four consecutive

levels of Teaching Practicals which are carried out in primary schools in the city of Rethymno and also the province of Rethymno. Students are allowed to undertake the first level of teaching practicals in their third semester of studies in the Department and complete the teaching practicals in the seventh semester of studies. The students undertake the practical exercises in groups of 12-15 people and are under the supervision of a university faculty member and a primary school teacher.

4.3 DIVISIONS OF THE DEPARTMENT

The Department of Primary Education covers a wide spectrum of teaching and research activities because of its inter-disciplinary character. The teaching and research interests cover a broad range of activities in different subject areas, which are described below.

4.3.1 Division of History and Sociology of Education

This Division includes subject areas related to:

- o Theory of History of Greek Education
- o Inter-cultural Education
- o Sociology of Education
- o Comparative Education
- o Education of Teachers

The focus of the Division is the historical and social development of Education and all its modern theoretical aspects, especially:

- The development over time of pedagogical thought and practice and its interrelationship with historical and social developments.
- The interconnection of the educational system with the other socio-economic subsystems, and their impacts on each other.

- The social integration of human beings into the wider social framework. The equality of educational opportunities and the strengths of the welfare state.
- The cross-cultural dimension of education in a continuously evolving world and the comparative analysis of various educational systems.
- The economics of education with all the relevant impacts on employment in the educational system.

4.3.2 Division of Educational Psychology and Methodology of Research

Included in this Division are the subject areas of:

- o Cognitive Psychology
- o Evolutionary Psychology
- o Social Psychology
- o Special Education
- o Methodology of Research

This Division puts emphasis on the teaching and research of psychological aspects of education, and on the education of individuals with normal development and growth, as well as of persons with special needs.

4.3.3 Division of Curriculum, Methodology of Teaching and Technology of Education

The subject areas included in this Division are:

- o Curriculum and Textbooks
- o Methodology of Teaching
- o Technology of Education
- o Evaluation of Education

The focus of the Division is the concept of curricula and its extensions as well as its modern theoretical and practical dimensions in the instructional process. More specifically, it covers:

- The nature, form, theory, growth and development over time of Analytical Programmes with their corresponding extensions in the school systems and in the instructional process.
- The connection of Analytical Programmes with the internal operations of the educational process (educational policy, educational aims, instructional materials, educational technology, instruction, schoolteacher, student).
- The "architecture" of teaching and the detailed planning of educational knowledge.
- The instructional systems, the models, the strategies and the means as well as their criteria of choice for the harmonisation of learning and teaching.
- The philosophical and psychopedagogic study, use and development over time of the means of educational technology (audiovisual, PC, multimedia and other technological achievements).

4.3.4 Division of Humanities and Social Sciences

Included in this Division are the subject areas of:

- o Modern Greek Language and Literature
- o Philosophy and Religious Education
- o Aesthetic Education

The Division focuses on the teaching and research of subjects which belong to the following cognitive areas:

- The Greek language in its diachronic and synchronic dimension and its interrelationship to the instructional process
- Modern Greek and Children's Literature
- Philosophy and Religious Education
- ◆ Aesthetics Physical Education and Music Education
- History and its Interrelationship to the Instructional Process, and
- Sociology

This Division includes the subject areas of:

- o Teaching and Epistemology of Mathematics
- o Teaching and Epistemology of Physics
- o Informatics in Education

The objective of this Division is the education of teachers in the sciences, the didactics of the sciences, information technology and education, environment and education, new technologies in education and, more generally, research and teaching in the sciences with an orientation toward the connection between sciences and education.

4.4 POSTGRADUATE STUDIES

The Department organized and has been operating a Programme of Postgraduate Studies since the academic year 1993-94. The objective of the Programme is to help its students to become specialized scientists in Education in order to contribute to the promotion of Education in Greece. Graduates could work at relevant research centres and Departments of Universities.

Postgraduate studies can lead to a Master's degree specializing in the Pedagogical Sciences, and also to a Doctorate in Education. Those who are eligible to study in the Postgraduate Programme are the following:

- a. Graduates of Departments of Primary Education,
 Departments of Preschool Education or Departments
 of Special Education, and
- Graduates of other Departments of Greek Universities, provided that they successfully passed at least four pedagogical courses during their undergraduate studies.
- Graduates of foreign universities can also be admitted to the Programme of Postgraduate Studies, provided that their undergraduate degree has been recognized as

equivalent to the relevant Greek degree by the Greek governmental agency responsible for evaluating degrees from foreign universities.

An additional prerequisite to acceptance into the Postgraduate Programme is success on the entrance examinations, which are announced by the department. The examinations refer to the following courses:

Introduction to the Pedagogical Sciences

- 1. Course of specialization
- 2. Foreign Language

The entrants must also successfully pass an interview.

The standard period of time required to earn the Master's degree is four semesters. The time allowed to obtain the Doctoral degree is a minimum of three years and a maximum of five years.

4.5 FACULTY MEMBERS

Professors

Damanakis, Michalis, Ph.D. 1977, University of Koln.
 Research interests: Pedagogics with emphasis on cross-cultural pedagogics.

e-mail: damanak@edc.uoc.gr, Tel: 0030 28310 77607

- Flouris, Georgios, Ph.D. 1978, Florida State University. Research interests: Curriculum and instruction. e-mail: gflouris@edc.uoc.gr, Tel: 0030 28310 77618
- Kanakis, Ioannis, Ph.D. 1984, University of Heidelberg.
 Research interests: Instructional design and AV media; educational programmes; teaching methodology; educational technology.

e-mail: ikanakis@edc.uoc.gr, Tel: 0030 28310 77619

Makrakis, Vasilios, Ph.D. 1988, University of Stockholm.
 Research interests: Computers in education and in educational research.

e-mail: makrakis@edc.uoc.gr, Tel: 0030 28310 77625

- Michaelides, Panagiotis, Ph.D. 1976, University of Athens.
 Research interests: Science and mathematics.
 e-mail: michail@edc.uoc.gr, Tel: 0030 28310 77627
- Papadogiannakis, Nikolaos, Ph.D. 1983, University of Berlin.

Research interests: Greek language with emphasis on the relationship between language and literature.

e-mail: npapadogiannakis@edc.uoc.gr, Tel: 0030 28310 77585

Ploumbidis, Dimitrios, Ph.D. University of Berlin.
 Research interests: Physics; atomic and electronic structure of condensed matter.

Tel: 0030 28310 77626

- Pyrgiotakis, Ioannis, Ph.D. 1978, University of Heidelberg.
 Research interests: History and sociology of education.
 e-mail: ipirgiotakis@edc.uoc.gr, Tel: 0030 28310 77606
- Troulis, Georgios, Ph.D. 1980, University of Paris V, Sorbonne.

Research interests: Methodology of teaching mathematics. e-mail: gtroulis@edc.uoc.gr, Tel: 0030 28310 77628

 Vamvukas, Michalis, Ph.D. 1981, University of Paris V, Sorbonne.

Research interests: Psychopedagogic research; methodology and psychopedagogics of reading.

e-mail: vamvukas@edc.uoc.gr, Tel: 0030 28310 77614

Vuidaskis, Vasilios, Ph.D. 1977, University of Koln.
 Research interests: Sociology with emphasis on the sociology of human rights and means of mass communication.

e-mail: vvouid@edc.uoc.gr, Tel: 0030 28310 77591

Associate Professors

 Hourdakis, Antonios, Ph.D. 1990, University of Paris V, Sorbonne.

Research interests: Science of education. e-mail: ahurdakis@edc.uoc.gr, Tel: 0030 28310 77611

 Kalogiannaki, Pella, Ph.D. 1988, University of Paris V, Sorbonne.

Research interests: Comparative education; school socialization. e-mail: pkalogian@edc.uoc.gr, Tel: 0030 28310 77612

 Moudatsakis, Tilemachos, Ph.D. 1980, University of Paris IV, Sorbonne.

Research interests: Theatrical education; education of speech. Tel: 0030 28310 77588

 Tzanakis, Konstantinos, Ph.D. 1987, Université Libre de Bruxelles.

Research interests: Didactics of science and mathematics. e-mail: tzanakis@edc.uoc.gr, Tel: 0030 28310 77629

Assistant Professors

 Anastasiadis, Panagiotis, Ph.D. 1999, Panteion University, Athens.

Research interests: Lifelong and distance learning. e-mail: panas@edc.uoc.gr, Tel: 0030 28310 77615

- Anastasiadis, Petros, Ph.D. 1980, University of Frankfurt.
 Research interests: Philosophy; philosophy of education.
 e-mail: petanas@edc.uoc.gr, Tel: 0030 28310 77587
- Andreadakis, Nikos, Ph.D. 1997, University of Crete. e-mail: Nandrea@edc.uoc.gr, Tel: 0030 28310 77621
- Basetas, Konstantinos, Ph.D. 1990, University of Athens.
 Research interests: Sciences of education with emphasis on pedagogic psychology.

e-mail: kmpasetas@edc.uoc.gr, Tel: 0030 28310 77608

 Chatzidaki, Aspasia, Ph.D. 1994, Vrije Universiteit Brussels.

Research interests: Bilingualism and bilingual education. e-mail: aspahatz@edc.uoc.gr, Tel: 0030 28310 77613

 Karagiorgos, Dimitrios, Ph.D. 1983, Florida State University.

Research interests: Social studies in primary school. e-mail: dkara@edc.uoc.gr, Tel: 0030 28310 77620

- Kourkoutas, Ilias, Ph.D. 1995, University of Liege.
 Research interests: Special education-psychopathology of childhood and adolescence; family dynamics; schooling and mental health educational therapy.
- e-mail: hkourk@edc.uoc.gr, Tel: 0030 28310 77617
- Michaelidis, Eleni, Ph.D. 1989, University of Birmingham.
 Research interests: Psychology; developmental psychology.
 e-mail: emichael@edc.uoc.gr, Tel: 0030 28310 77609
- Papavasileiou, Ioannis-Evaggelos, Ph.D. 1990, City University of New York.
 Research interests: Computer and information systems

(artificial intelligence and expert systems). e-mail: vpapav@edc.uoc.gr, Tel: 0030 28310 77630

- Vasilaki, Eleni, Ph.D. 1992, University of Dundee.
 Research interests: Cognitive psychology.
 e-mail: vasilaki@edc.uoc.gr, Tel: 0030 28310 77616
- Vlahakis, Irini, Ph.D. 1986, University of Crete
 Research interests: History of Crete during the Venetian occupation.

e-mail: evlahaki@edc.uoc.gr, Tel: 0030 28310 77586

Specialized Teaching Staff

 Giamalakis, Errikos, B.A. 1971, Institute of Physical Education, University of Graz.

Research interests: Physical education.

Tel: 0030 28310 77600

 Psaropoulou, Anastasia, Magister Artium 1975 in German literature, University of Koln.

Research interests: German for academic purposes. e-mail: apsarop@edc.uoc.gr, Tel: 0030 28310 77617

 Theodosakis, Frixos, B.A. 1976, School of Fine Arts, Athens.

Research interests: Aesthetic education. e-mail: frixos@edc.uoc.gr, Tel: 0030 28310 77589, 77637

Specialized Technical Personnel (Undergraduate Students Laboratories)

- Anagnostakis, Simos, Electronic engineer
 e-mail: sanagn@edc.uoc.gr, Tel: 0030 28310 77623
- Papadakis, Michael, Electronic engineer
 e-mail: mpapad@edc.uoc.gr, Tel: 0030 28310 77602

The Department also employs Adjunct Professors on a yearly contract basis.

4.6 LABORATORIES

There are five laboratories with the infrastructure necessary to support the Programme of Studies at both the undergraduate and postgraduate level.

4.6.1 The Laboratory for Teaching Sciences

This Laboratory has as its mission to:

- Cover the instructional needs, particularly with regard to the experimental process of teaching and the practical exercises, for the undergraduate and postgraduate level students of the Department.
- Cover the instructional needs of other Departments of the University, insofar as this is feasible and requested by other Departments.
- Conduct research into the didactics of the Sciences and the related areas and, more generally, into the science of Education.

4.6.2 The Laboratory for Research on Education and Audiovisual Means

This Laboratory covers research, educational and instructional needs in the following cognitive areas: History and sociology of Education; comparative pedagogics; theory and methodology of teaching; educational technology; educational evaluation; didactics - methodology of individual courses; theories of learning and learning disorders; education of individuals with special needs; and school and career guidance.

The goals of the laboratory are to:

- Cover the instructional needs of the Department, particularly as regards issues of psychopedagogic research, production of audiovisual means and practical exercise of students in the use of these means.
- Create a school museum and an archive of textbooks.
- Develop research programmes in the framework of the educational sciences for both undergraduate and postgraduate students.
- Strive for collaboration with faculty members of other related departments in other institutions of higher education or research centres, both within Greece and abroad
- · Provide relevant educational services.
- Collaborate with educational services to promote issues of common interest.
- Publish a scientific magazine, which presents the results of research and other activities of faculty members of the Department, as well as those of faculty members of other Departments of the University of Crete and foreign universities.

4.6.3 Intercultural Education and Migration Studies Centre

The aims of the Centre are to:

- Conduct research and promote issues concerning education of Greeks of the Diaspora, in connection with their socioeconomic and cultural situation and the cultural conditions of the countries in which they live.
- Conduct research and promote issues concerning education of both repatriated Greeks and also foreigners living in Greece, in connection with the socioeconomic, cultural, political and educational conditions in Greece.
- Organize and train the educators who teach Greek as a Second Language to Greek or non-Greek students abroad, or to repatriated Greeks or foreign students in Greece.
- Produce educational material for the teaching of Greek as a Second Language as well as the teaching of Greek culture, to the abovementioned categories of Greek and foreign students.
- Promote bilingual, bicultural and intercultural education and training through research and through collaboration with other institutions in Greece and abroad that address issues and goals similar to those of this Laboratory.
- Promote the intercultural and the European dimension of Education and to apply these dimensions to the educational process in Greece.
- Promote intercultural, comparative, historical and sociological studies concerning the historical and cultural evolution and the contemporary aspects of Education in European and Mediterranean countries.
- Work cooperatively with the other Departments of the University of Crete.
- Organize seminars, symposiums, conferences, and lectures and publish relevant material.

The Intercultural Education and Migration Studies Centre has three basic units:

Research Unit

The aim of this unit is threefold: first, to define the Centre's research strategy; second, to organize and conduct research; and third, to produce examinations on specific topics, which mainly concern intercultural upbringing and education, transfer of populations and meeting of cultures. Furthermore, the Research Unit trains educators, and holds seminars, symposiums, conferences and speeches relevant to the aforementioned topics.

Documentation Unit

The basic aim of the Documentation Unit is the collection and sorting of records and documents (legislative papers, rare publications, photographic and audio visual material), which comprise a historical treasure and can be used as a basis for scientific research for the Centre's purposes. In



addition this Unit collects specialized bibliography, useful both for the Centre's research activities and also for postgraduate students who have access to it.

Material Production Unit

This Unit produces material useful for teaching Greek as a Second or Foreign Language and elements of History and Culture, either to Greek pupils abroad or repatriated pupils at home. Among the objectives of the Unit, is the creation of intercultural material useful for school classes consisting of pupils from different cultural backgrounds.

Along with its research and other publishing activities, the

Centre is also responsible for the publication of the

Department's quarterly journal "Educational Sciences" [in

Greek]" (formerly called "School and Life" [in Greek]). It

is the oldest Greek pedagogical journal; it has been published

with the assistance and under the responsibility of the Centre



since 2000.

4.6.4 The Laboratory of Informatics

4.6.5 The Laboratory of Aesthetic Education

4.7 INTERNATIONAL SCIENTIFIC CONGRESSES

3-5 November 1995: "The Pedagogic Science in Greece

and Europe: Tendencies and Prospects"

9-12 May 1997: "Education and National Minorities"

26-28 June 1998: Panhellenic Congress: "Greek-Speaking

Education Abroad"

6-8 October 2000: "Learning and Teaching Greek as a

Maternal and as a Second Language"

2000: International Congress on Special Education

April 1992: International Congress entitled "Europe in the

School, the School in Europe"

5. DEPARTMENT OF PRESCHOOL EDUCATION

Departmental Secretariat

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Departmental Secretary: Evangelia Psaroudaki

5.1 BACKGROUND OF THE DEPARTMENT

The Department of Preschool Education of the University of Crete is located at the Rethymno campus of the University, in the area of Gallos, a few kilometres outside the city of Rethymno.

The Department of Preschool

Education admitted its first class of students in the academic year 1987-88. Today the student population is more than 560.

The objectives of the Department are to:

- Develop and promote the educational sciences through teaching, research and training.
- Instill the appropriate academic and scientific orientation to the teaching profession.
- Keep innovating education and information technology by servicing the ever-increasing needs of the field.
- · Contribute to research concerning educational problems.

5.2 UNDERGRADUATE STUDIES

The courses offered at the Department are designed to:

- Enhance the search for knowledge, cooperation and a democratic outlook.
- Provide students with the skills necessary to understand and cope with contemporary problems in the field of education.
- Promote autonomous research, initiative and productivity.
- Foster the spirit of friendship, cooperation and receptivity to multiculturalism and diversity, through project work and group presentations.

A Bachelor of Arts (B.A.) degree, granted by the Department of Preschool Education of the University of Crete, qualifies graduates as preschool teachers. The minimum number of semesters required for the B.A. degree is eight.

The courses in the Programme of Studies are divided into six categories. These are:

- a. The compulsory basic courses, offered during the eight semesters of the Undergraduate programme.
- b. The required elective courses.
- c. The compulsory seminars, attended by a restricted number of students (up to 20).
- d. The Laboratory courses, of which students can choose

- one.
- e. The Teaching Practicals, which are compulsory and take place in experimental or other nursery schools in the city or province. The Teaching Practicals are organized in three levels, each covering one year of study.
- f. The optional, general foundation, courses offered by other Departments of the University.

A course may be taught in one or more semesters; in that case the code numbers differ (e.g. Developmental Psychology I, II, Music and Dramatic Play in Preschool Education. I, II, III). Each semester course comprises a number of credit hours. A credit hour corresponds to a weekly hour of teaching per semester. The preschool teachers' B.A. degree requires 159 credit hours. All courses (lectures and seminars) are taught three hours per week, except for the practicals which can cover more teaching hours, according to the course instructor's assessment. The courses taught take the form of: a) Lectures/Lessons, b) Seminars, or c) Practicals. Lectures and Seminars can be attended by students of other Departments.

The following table indicates the number of Lectures/ Lessons, Seminars and Practicals required during the four years of studies.

Courses	Number	
Course Credits		
I. Compulsory Introductory/Basic courses	23	
69		
2. Required Electives	11	
33		
3. Seminars	4	

Total	52
21	
7. Optional courses	7
15	
6. Practicals	5
3	
5. Laboratory	I
6	
4. Senior Year Dissertation Seminar	I
12	

l 2

159

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All students prepare and defend a Senior Dissertation of their choice within the study areas of the Preschool Department. Accordingly, they attend a special seminar three hours per week, during the last semester of their studies; the maximum number of participants is 12 students. The supervisor is responsible for the organization of seminars. Fourth-year students are requested to choose one of the Senior Year Dissertation Seminars which are announced at the beginning of the Winter term. The criteria for the choice are specified by the supervisor. Each student submits his/her Senior Dissertation to the Departmental Secretariat. These papers constitute a data bank, useful for scientific undertakings of the Department.

The students of the Department can participate in the Educational Exchange programmes of the European Union.

The courses offered by the Department, by subject area, are the following:

- I. Educational Sciences (43 courses)
- 2. Psychology (22 courses)
- 3. Sociology (8 courses)
- 4. Philology, Philosophy, History, Theology (20 courses)
- 5. Mathematics, Statistics, Informatics (7 courses)
- Music, Aesthetic Education, Physical and Psychomotor Education (4 levels each)
- 7. Foreign Languages (4 levels)
- 8. Seminars
- 9. Teaching Practicals (3 levels)

5.3 POSTGRADUATE STUDIES

The Department of Preschool Education of the University of Crete offers a postgraduate programme that was set up in 1993 and modified in the academic year 2000-2001. The objectives of the postgraduate programme are:

• The acquisition and assessment of new scientific knowledge

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- through intensive research and specialized study in expertise and innovative fields of study and,
- The development of new researchers and scientists in all specializations of Educational Sciences.

The postgraduate programme offers the following degrees:

- a. Master of Arts (M.A.) in the fields of:
 - o Preschool Education
 - o Educational Psychology in Early Childhood
- b. Ph.D. in Educational Sciences.

5.4 FACULTY MEMBERS

Professors

 Kitsaras, Georgios, Ph.D. 1983, University of Erlangen Nürnberg.

Research interests: Methodology of the activities of preschool education.

e-mail: gkitsaras@edc.uoc.gr, Tel: 0030 28310 77667

 Krasanakis, Georgios, Ph.D. 1980, University of Paris V, Sorbonne.

Research interests: Educational psychology. e-mail: gkrasanakis@edc.uoc.gr, Tel: 0030 28310 77655

Tzavaras, Ioannis, Ph.D. 1978, University of Munich.
 Research interests: Philosophy with an emphasis on metaphysics.

e-mail: itzavar@edc.uoc.gr, Tel: 0030 28310 77658

Associate Professors

 Metoxianakis, Ilias, Ph.D. 1982, Johannes Gutenberg University Mainz.

Research interests: The pedagogics of School and Preschool. e-mail: metoxian@edc.uoc.gr, Tel: 0030 28310 77659

• Mihopoulos, Anastasios, Ph.D. 1990, Panteion University, Athens.

Research interests: The organization, administration and legal framework of Education.

e-mail: amixopoul@edc.uoc.gr, Tel: 0030 28310 77668

 Pourkos, Marios, Ph.D. 1987, Jagiellonian University of Krakow.

Research interests: Pyschopedagogics: Alternative experiential contexts of cognitive, affective and moral development and education.

e-mail: mpourkos@edc.uoc.gr, pourkos@psy.soc.uoc.gr, Tel: 0030 28310 77657

Assistant Professors

 Chlouverakis, Gregoris, Ph.D. 1990, State University of New York at Stonybrook.

Research interests: Statistics in Education. e-mail: gchlouve@edc.uoc.gr, Tel: 0030 28310 77674

 Diamantopoulos, Panayotis, Ph.D. 1986, University of Erlangen Nürnberg.

Research interests: The pedagogics of School and leisure time.

e-mail: pdiamant@edc.uoc.gr, Tel : 0030 28310 77683

- Korosis, Konstantinos, Ph.D. 1982, University of Cologne.
 Research interests: The sociology of the family.
 e-mail: korosis@edc.uoc.gr, Tel: 0030 28310 77660
- Kurti, Evaggelia, Ph.D. 1985, University of Paris X, Nanterre.
 Research interests: Social psychology with emphasis on issues of communication.

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 Matsopoulos, Anastasios, Ph.D. 1995, State University of New York at Albany.

Research interests: School psychology and counselling. e-mail: amatsopoulos@edc.uoc.gr, Tel: 0030 28310 77673

 Strataridaki, Anna, Ph.D. 1988, University of California at Davis.

Research interests: Ancient Greek history with special emphasis on significant milestones and their educational extensions.

e-mail: astrat@edc.uoc.gr, Tel: 0030 28310 77664

 Tafa, Effimia, Ph.D. 1994, University of Wales, University College of Swansea.

Research interests: The pedagogics of preschool education with special emphasis on the variations in learning and behaviour.

e-mail: etafa@edc.uoc.gr, Tel: 0030 28310 77661

Lecturers

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 Fountoulakis, Andreas, Ph.D. 1995, University of Manchester.

Research interests: Greek literature and theatre. e-mail: afount@edc.uoc.gr, Tel: 0030 28310 77672

- Hatzistefanidou, Sofia, Ph.D. 1997, University of Frankfurt.
 Research interests: The history of the institution of Education and of pedagogical thought.
- e-mail: shatzistef@edc.uoc.gr, Tel: 0030 28310 77663
- Kornilaki, Ekaterini, Ph.D. 1999, University of London. Research interests: Psychology of the preschool age. e-mail: ekornilaki@edc.uoc.gr, Tel: 0030 28310 77663
- Manolitsis, Georgios, Ph.D. 2000, University of Crete.
 Research interests: Psychopedagogics of the preschool age.
 e-mail: gmanolitsis@edc.uoc.gr, Tel: 0030 28310 77663
- Stavrianos, Kyriakos, Ph.D. 1998, Aristotle University of Thessaloniki.

Research interests: Orthodox patristic theology. e-mail: stavrianos@edc.uoc.gr, Tel: 0030 28310 77672

• Zaranis, Nikolaos, Ph.D. 2000, University of Athens. Research interests: Informatics in Education. e-mail: nzaranis@edc.uoc.gr, Tel: 0030 28310 77663

Specialized Teaching Staff

 Anyfantakis, Dimitris, B.A. 1982, National Academy of Physical Education.

Research interests: Physical education. e-mail: danyf@edc.uoc.gr, Tel: 0030 28310 77671

- Ioannidou, Ioanna, B.A. Bard College, M.A. 1968 in English and Comparative Linguistics, New Mexico Highlands University, Doctorale 1972 in English and Greek as a Second and/or Foreign Language, University of Utrecht.

 Research interests: English for Educators, comparative linguistics, Greek as a second and/or foreign language.

 e-mail: joann@edc.uoc.gr, Tel: 0030 28310 77670
- Vernardou, Vilhelmini, B.A. 1964 Teaching Academy, Heraklio; Degrees in Choir, Synthesizer and Piano from Greek Conservatory of Music.

Research interests: Music Education. e-mail: vverna@edc.uoc.gr, Tel: 0030 28310 77669

 Zervoudakis, Stylianos, Degrees in Western Music 1983-1990, Greek Conservatory of Music.

Research interests: Music Education. e-mail: szeboud@edc.uoc.gr, Tel: 0030 28310 77669

Specialized Technical Personnel

- Korakaki, Ekaterini
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- Mylona, Eugenia
 e-mail: emilona@edc.uoc.gr, Tel: 0030 28310 77652
- Nyktaris, Konstantinos
 Tel: 0030 28310 77685

· Viviraki, Kornelia

Tel: 0030 28310 77651

The Department also employs Adjunct Professors on a yearly contract basis.

5.5 INDEPENDENT LABORATORIES

The following laboratories have been established and are in operation within the Department of Preschool

Education.

5.5.1 Educational Research and Implementation

This Laboratory contains two units:

- o The Teaching Methodology and Implementation Unit, and
- o The Educational Psychology Research Unit.

The Laboratory serves academic and research needs in the field of Education, such as development of curricula, teaching methods and use of educational resources for the





This lily, among the most beautiful of the autumn wildflowers in Crete, can be found in the oak forest at the University campus in Rethymno.

FACULTY OF SOCIAL SCIENCES

DEPARTMENTS:

- **+** Sociology
- **+** Economics
- + Psychology
- **♦ Political Science**



6. DEPARTMENT OF SOCIOLOGY

Departmental Secretariat

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Departmental Secretary: Eleftheria Alevizaki

6.1 BACKGROUND OF THE DEPARTMENT

The Department of Sociology of the University of Crete is located at the Rethymno campus in Gallos. It was the second Department of Sociology in Greece when it accepted its first student enrolments in 1987; the first graduates earned their B.A. degree in 1991. Currently the Department has 579 undergraduate students and 9 Ph.D. candidates.

6.2 UNDERGRADUATE STUDIES

6.2.1 Structure of the Programme

The department emphasizes rigorous training in sociological theory and in research methods. It includes a sequence of compulsory and optional courses on theory and the construction of theory, designed to acquaint every student with the skills necessary for developing explanations of social behaviour. Compulsory and optional courses in methods and statistics familiarize students with the basic techniques for collecting and analysing data on social processes.

For undergraduates the department offers a well-developed Programme of Studies leading to the Bachelor's degree. The standard period of time required to complete



studies is four academic years or eight semesters. In order to ensure that the studies encompass both the depth and breadth necessary to provide a solid foundation in the discipline of Sociology, there is a common set of compulsory courses for all students. After these requirements have been satisfied, students may choose among four areas of specialization that allow them to focus on one of the following four areas: Social Theory and Methodology; Social Change; Political Sociology; and Civilization-Culture. Within each specialization, students must take a core course introducing that area of sociology, which is then followed by a wide variety of choices among courses.

The courses offered in the Department of Sociology are on a semester basis; two (thirteen week) semesters per academic year, i.e. Fall and Spring semesters. Courses (3-4 hours per week) are distinguished into compulsory and optional courses. Not all courses are offered on a regular basis. Courses can take the form of: Lectures, Seminars, Foreign Language Instruction, Senior Year Dissertation, or Field Practicum. For each of the above, there may be prerequisites.

More specifically, lectures provide an overall and general introduction to a particular area of study. They are open to all students, who are usually assessed by means of a written three-hour examination. In contrast, seminars have prerequisites and are open mainly to 3rd and/or 4th year students; the number of students participating in a seminar is limited to 15-20 students. Seminars cover a wide range of topics of discussion and investigation. In seminars students are required to research and study in depth a particular theme within a defined subject area, make an in-class presentation on it, and finally, submit a term paper on the given theme at the end of the semester. Also, a senior year dissertation is now an available option.

A field practicum programme for students in the last

year of their study is now being developed that would involve field placements in state agencies and public-sector institutions, or private enterprises, under the supervision of a departmental faculty member.

It is also possible for students to take a limited number of courses offered by other departments. In return, students from other faculties and departments may register for courses offered by the Department of Sociology. Students work out their individual programmes in consultation with the relevant Departmental Counsellor for the Programme of Studies.

To graduate a student should take 44 courses, of which I I are compulsory, four are compulsory in foreign languages, and three are core courses in the area of specialization. The remaining courses are optional courses of which at least six should be seminars. Compulsory courses and seminars carry four credit units, optional courses carry three credit units while the senior year dissertation carries seven credits. The Department follows the European Community Course Credit Transfer System (ECTS).

6.2.2 Undergraduate Courses

Following is a list of the undergraduate course offerings of the Department.

a. Winter Semester

Introduction to Sociology
Social Theory I (Classical Theory)
Social History
English for Sociologists - Level A
English for Sociologists - Level C
Social Anthropology
Social Theory III (Modern)
Sociological Methods and Techniques II
Comparative Political Sociology
Social Inclusion, Social Exclusion

b. Spring Semester

Sociology of Reading Social Theory II (Classical theorists)

Economic Sociology (Introduction) Social Statistics

Research & Social Scientific Writing in English

Introduction to Criminology Introduction to Political Sociology

Political Sociology of European Integration Theories of Social Change and Development

Sociology of Education Sociology of Culture

Sociology of Communication Methods and Techniques of Sociological Research II

Sociology of the Information Society

English for Sociologists – Level B

Introduction to Social Policy

English for Sociologists – Level D

Social Policy of Decicle B. Received B.

Social Policy and the Welfare State Sociology of Deviant Behaviour

Technology- Work-Professions Historical Sociology

Sociology of the Trade Union Movement Research & Social Scientific Writing in English

Sociology of Religion

Minorities in the Balkans

Socio-economic and Cultural Dimensions of Globalization

Nationalism & Culture

Sociology of the Elites

Modernity and Democracy

Introduction to the Methodology of Sociological Research Sociology of Political Parties

Sociology of Gender Ideology and Culture

Psychoanalysis and Social Theory Ideology and Propaganda
Special Topics in the Sociology of Deviant Behaviour Language and Society

Special Topics in Modern Social Theory I Sociology of the Labour Movement
Special Topics in the Sociology of Art Political Sociology of the Mass Media

Special Topics in Modern Social Theory II Contemporary Theories of Class Analysis

Special Topics in the Sociology of Development European Social Policy
Society and the Environment Sociology of Youth

Special Topics in Ideology and Culture Industrial Sociology-Sociology of Work II

Education and Stratification Society, Economy and the State in Post-war Greece

European Integration and the Modernisation of the Greek Sociology of Small Enterprises

Edit opean integration and the Floder installation of the direct

State Migration-Diasporas
Sociology of Minorities Gender and Politics

Socioeconomic Restructuring and Social Movements Special Topics in Classical Theorists in Sociology

Special Topics in the Sociology of Work

Special Topics in the Sociology of Free Time

Qualitative Research Methods Seminar Seminar in Economic Sociology

Sociology of Law and Gender Social & Political Forces in Greece (seminar)

Quantitative Research Methods Seminar Special Topics in Urban Anthropology

Dissertation Option Special Topics in the Sociology of Education

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Special Topics in European Integration
Sociology of Industrial Relations (seminar)
Special Topics in Social Policy and the Welfare State
Special Topics in the Anthropology and Sociology of Religion
& of Ritualistic Practices

Seminar in the Ethnography of Greece

Modern Greek Society (seminar)

Sociology of Gender, Women's Movement (seminar)

Social Reconstruction of Crime and Violence in the Mass Media (seminar)

Mass Media & Gender (seminar)

Local Social Change (seminar)

Dissertation Option

6.3 POSTGRADUATE STUDIES

The Department participates in two interdepartmental and interdisciplinary postgraduate programmes at the Master's level. These are:

- The postgraduate programme in "Contemporary Greek and European History"; jointly with the Department of History and Archaeology (which coordinates the programme).
- The postgraduate programme in "Bioethics"; jointly with the Departments of Medicine, Biology, and Philosophy and Social Studies; the latter coordinates the programme.

The department also expects to offer a self-contained Master's programme in Sociology in the near future.

6.4 FACULTY MEMBERS

Professors

 Kousis, Maria, Ph.D. 1984, University of Michigan, Ann Arbor.

Research interests: Environmental sociology focused on social organizations (state, institutions, social groups) and

environmental politics; social movements, with an emphasis on the environmental and women's movements; political and socio-economic dimensions of sustainable development, tourism, and rural areas; social change in southern Europe; research methods, with an emphasis on protest event/case analysis.

e-mail: kousis@social.soc.uoc.gr, Tel: 0030 28310 77477

 Papaioannou, Skevos, Ph.D. 1983, Friedrich-Alexander-Universität Erlangen-Nürnberg.

Research interests: Sociology of education; sociology of migration; social inequalities and social exclusion; social transformation of local societies between tradition and modernity; sociology of youth; sociology of work; work and education; adult education.

e-mail: skevos@social.soc.uoc.gr, Tel: 0030 28310 77486

Associate Professors

 Halaris, George, Ph.D. 1982, Ecole des Hautes Etudes en Sciences Sociales, Paris.

Research interests: Sociology of development; social change; migration; globalization; social movements.

e-mail: halaris@social.soc.uoc.gr, Tel: 0030 28310 77470

 Moschonas, Andreas, Ph.D. 1982, Queen's University, Canada.

Research interests: Political sociology with emphasis on European integration; social dimension of European integration; comparative political sociology with emphasis on southern Europe and the Euro-Mediterranean partnership; theories of class analysis with emphasis on the Greek experience and Marxist political theory.

e-mail: moschonas@social.soc.uoc.gr, Tel: 0030 28310 77484

Papageorgiou, Yota, Ph.D. 1985, Florida State University.
 Research interests: Gender studies; social movements with

emphasis on women's movement; social sciences methodology (qualitative and quantitative); political culture with emphasis on southern European cultures.

e-mail: papageo@social.soc.uoc.gr, Tel: 0030 28310 77487

Assistant Professors

• Fournaraki, Eleni, Ph.D. 1992, University of Paris VII. Research interests: History of women and gender relations; social history of education; social history of physical education and sports.

e-mail: elfou@social.soc.uoc.gr, Tel: 0030 28310 77483

• Gounis, Kostas, Ph.D. 1993, Columbia University. Research interests: Survival strategies of the new urban poor and the simultaneous emergence of new institutional arrangements and disciplinary mechanisms aimed at the domestication of urban marginality; ethnographic film; "outsider art."

e-mail: gounis@social.soc.uoc.gr, Tel: 0030 28310 77472

Koniordos, Sokratis M., Ph.D. 1996, University of London.
 Research interests: Economic sociology and the sociology of work, particularly social capital, social embeddedness and trust, work identity, work relations, self-employment and small business, entrepreneurship.

e-mail: skoni@social.soc.uoc.gr, Tel: 0030 28310 77471

Lavranou, Aliki, Ph.D. 1996, University of Göttingen.
 Research interests: Sociological theory; political theory; epistemology and the methodology of social science.
 Tel: 0030 28310 77466

 Samatas, Minas M., Ph.D. 1986, New School for Social Research, New York.

Research interests: Political sociology and the modernization/ Europeanization of the modern Greek state and society; the Greek and European information society and social informatics. e-mail: samatas@social.soc.uoc.gr, Tel: 0030 28310 77488 • Zambarloukou, Stella, Ph.D. 1994, New York University. Research interests: Sociology of development; social change; science and technology; public policy.

e-mail: zamba@social.soc.uoc.gr, Tel: 0030 28310 77466

Lecturers

- Aheimastos, Myron, Ph.D. 1985, University Paris VII-Jussieu.
 Research interests: Ideology; sociology of religion; aspects of Durkheim's work.
- e-mail: myron@social.soc.uoc.gr, Tel: 0030 28310 77479
- Giannissopoulou, Maria, Ph.D. 1992, Ecole des Hautes Etudes en Sciences Sociales, Paris.

Research interests: Social anthropology, and particularly the transformation process of social formations; ethnic and religious groups in contemporary society: space and society and social organization and co-existence; deviant social behaviour in contemporary societies concerning the disease, the miracle and the treatment: the rational and the irrational in the informal social beliefs and institutions.

e-mail: maya@social.soc.uoc.gr and mayas@otenet.gr, Tel: 0030 28310 77473

- Konstandakopoulos, Stavros, Doctorat d'Etat d'Etudes Politiques 1992, University of Paris II / Panthéon-Assas.
 Research interests: Sociology of consumption; social capital; classical social theory and theories of the elites.
 e-mail: konst@social.soc.uoc.gr, Tel: 0030 28310 77482
- Konstantinidou, Christina, Ph.D. 1998, Panteion University, Athens.

Research interests: Analysis of the relationship between globalisation, new social movements and media discourse. e-mail: chrkon@social.soc.uoc.gr, Tel: 0030 28310 77474

 Leontsini, Mary, Ph.D. (Doctorat) 1991, Ecole des Hautes Etudes en Sciences Sociales, Paris. 90

Research interests: Sociological aspects of cultural practices, particularly the sociology of reading; sociology of the arts: artistic taste and artistic consumption, gender and cultural heritage issues, politics of memory and narrative construction of the past, social construction of gendered identities; life-stories and social memory.

e-mail: leontsini@social.soc.uoc.gr, Tel: 0030 28310 77477

 Petoussi, Vassiliki, Ph.D. 1998, Virginia Polytechnic Institute and State University.

Research interests: Criminology; sociology of law and gender and social statistics; longitudinal studies of criminality in Greece; police structure and organization; police unions. e-mail: petousi@social.soc.uoc.gr, Tel: 0030 28310 77469

Specialized Teaching Staff

- Ammari, Maria, M.A. 1995 in Diplomatic Studies, University of Westminster; M.A. 1996 in Learning and Teaching English, University of London; M.A 1999 in Civilization and New Technologies, University of the Aegean. Research interests: English for specific purposes. e-mail: amari@social.soc.uoc.gr, Tel: 0030 28310 77473
- Havredaki, Irene, M.A. 1984 in English Literature, Southern Illinois University, Ph.D. 1991 in English Language and Literature, University of Connecticut at Storrs.
 Research interests: English for sociologists, English literature, English for scientific writing.
 e-mail: chavrede@social.soc.uoc.gr, Tel: 0030 28310 77474

Specialized Technical Personnel

Tsiridanis, Alexandros, Computer Systems
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 Fax: 0030 28310 77501

The Department also employs Adjunct Professors on a yearly contract basis.

6.5 SUMMER SCHOOLS

Two different annual summer school programmes are organised annually by faculty members of the Department of Sociology. Both programmes are open to postgraduate students both from Greece and from abroad, use English as a medium of communication, and focus on varying topics which are decided upon each year.

The first summer school programme, directed by Skevos Papaioannou, focuses on a particular topic each year and concentrates on assisting Ph.D. students to review aspects of their research. The second summer school programme, directed by Andreas Moschonas, concentrates upon topics with an explicit European Union theme. Several publications have resulted from the work carried out within these two programmes.

6.6 JEAN MONNET PROGRAMME

The Department of Sociology is very active in Jean Monnet sponsored activities. Andreas Moschonas holds a Jean Monnet Chair in the Political Sociology of European Integration, while Minas Samatas teaches a Jean Monnet course. In addition, operating within the Faculty of Social Sciences is a Jean Monnet European Centre of Excellence. The Centre, which is directed by Andreas Moschonas, was established in 2001 to serve as the principal organization for promoting and conducting cross-disciplinary collaborative research related to European integration in the Faculty of Social Sciences of the University of Crete.

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7. DEPARTMENT OF ECONOMICS

Website: www.soc.uoc.gr/econ/, e-mail: kalogeraki@econ.soc.uoc.gr

Departmental Secretariat

Tel: 0030 28310 77405, 77430, Fax: 0030 28310 77406

Departmental Secretary: Eleni Kalogeraki

7.1 BACKGROUND OF THE DEPARTMENT

The Department of Economics began operating in 1987. Since the University's move to its new campus several years ago, the Department has been located at the Rethymno campus in Gallos. There are currently over 750 undergraduate students and 40 postgraduate students enrolled in the Department, while more than 630 students have graduated from the Department since its inception.

The Department offers courses in four areas of study: economic theory and quantitative methods; economics of the firm; political economy - history - development; and applied economics and international economic relations. Students are also taught four compulsory courses in English for economists.

7.2 UNDERGRADUATE STUDIES

The objective of the Department of Economics is to provide a framework of studies which is in keeping with the modern trends of Economic Science and also satisfies the needs of Greek society for scientists in the area of Economics.

Studies for the undergraduate degree are completed in eight academic semesters. Successful completion of studies leads to the awarding of the B.A. degree in Economics,



which requires attendance and successful examination in 48 semester courses, which are provided by the department or by other University Departments. Each semester course is taught three hours per week and is equivalent to three ECTS credits.

7.2.1 Principles of the Programme of Studies

The principles of the programme are determined by the elements described below.

a. Subject Area

The subject area is a unified area of knowledge, in accordance with international developments in the field of economics. The field of knowledge refers either to a specific theoretical approach (such as macroeconomics) or to a subject area (such as environmental economics) which includes many theoretical approaches. It is obvious that with the exception of the areas of economic theory and quantitative methods, which are regarded as a necessary part of the education of every economist, the remaining subject areas, as far as possible, should present a representative sample of the various theoretical approaches.

b. Specialization

An informal certificate of completion will be given to a student who has specialized in a subject area which is of special interest to him/her. Thus a student may choose, for example, Economics of the Firm or another subject area offered by the Department, but this concerns his/her own choices and not the established specialization which the Department offers. The degree of the Department is a degree in economics.

c. Optional Courses

The programme of studies should encourage student initiative, development of students' special interests, the systematic and methodical exploration of special topics, along with the search for the general knowledge that the social sciences offer. Consequently, the compulsory core of courses should be kept to the minimum level necessary, thus enlarging that part of the programme of studies which is open to student choice.

d. Framework of the Programme of Studies

The framework of the programme is therefore based on the principles described above. Forty-eight courses are required in order to obtain the degree. The courses are distributed as follows:

- Fourteen compulsory courses in the subject areas of Economic Theory and Quantitative Methods.
- 2. Four compulsory courses in the foreign language: English for Economists.
- 3. Thirty optional courses. These courses are grouped by subject area. The choices of optional courses must satisfy the following requirements:
 - Fifteen required selection courses offered by the Department.
 - 3.2 Seven free choice courses from those offered by the Department.
 - 3.3 Of the total 22 courses in (3.1) and (3.2) above, at least three must be seminars.
 - 3.4 The remaining 8 courses (up to the maximum of 30) can be chosen either from the courses that are offered by the Department of Economics or from those offered by other Departments of the University of Crete.

The Department also offers the opportunity for students

to receive work-study experience at banks or other organizations related to their field of study. The positions are limited and participation by students is voluntary. The programme is funded by the European Framework Programme.

7.2.2 Structure of the Programme of Studies

a. Courses offered by the Department of Economics

[Note: C denotes compulsory course, (S) denotes class usually offered in seminar form]

ECONOMIC THEORY

(Compulsory courses: 6)

Microeconomics I	(C)	Macroeconomics I	(C)
Microeconomics II	(C)	Macroeconomics II	(C)
Microeconomics III	(C)	Macroeconomics III	(C)
Microeconomics IV	(S)	Macroeconomics IV	(S)

QUANTITATIVE METHODS

(Compulsory courses: 8)

Mathematics I	(C)	Econometrics II	(C)
Mathematics II	(C)	Econometrics III	
Mathematics III		Computers I	(C)
Statistics I	(C)	Computers II	(C)
Statistics II	(C)	Computers III	
Statistics III		Applied Econometr	ics (S)
Econometrics I	(C)		

FOREIGN LANGUAGE

(Compulsory courses: 4)

English for Economists I	(C)	English for Economists IV	(C)
English for Economists II	(C)	Advanced English	
English for Economists III	(C)		

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APPLIED ECONOMICS - INTERNATIONAL ECONOMIC RELATIONS

(Required Selections: 5)

Public Economics I		European Economic Integration I	
Public Economics II		European Economic Integration II	(S)
Economic Policy I		International Trade	
Economic Policy II	(S)	International Financial Markets	(S)
Health Economics	(S)	Agricultural Economics	
Monetary Theory I		Agricultural Policy	
Monetary Theory II	(S)	Environmental Economics	
Economic Growth I		Economics of Natural Resources and Energy	
Economic Growth II	(S)	Labor Economics II	(S)
Regional Economics		Game Theory	
The European Monetary System and		Special Issues in Macroeconomic Theory	(S)
Economic Monetary Union*	(S)		
Labor Economics – European Labor Markets I*		European Integration – European Financial Markets	(S)
Economic Relations between the		Input-Output Tables – National	
European Union and Mediterranean Countries*	(S)	Accounts	(S)

^{*} Jean Monnet course

ECONOMICS OF THE FIRM

(Required Selections: 5)

Economics of the Firm		Stock Exchange (Analysis - Forecasts)
Regulatory Economics		Elements of Law
Industrial Organization I		Commercial - European Law
Industrial Organization II	(S)	Marketing I
Finance I		Marketing II
Finance II	(S)	Project Appraisal
Accounting I		Economics of Technology
Accounting II		Management I
Accounting III		Management II

POLITICAL ECONOMY _ ECONOMIC HISTORY _ DEVELOPMENT

(Required Selections: 5)

History of Economic Thought I		Political Economy II	(S)
History of Economic Thought II	(S)	Political Economy of the Welfare State	
Marxist Analysis I		Economic Development I	
Marxist Analysis II		Economic Development II	(S)
Greek Economy I		Economic Development III	(S)
Greek Economy II	(S)	Economic Geography	
Greek Economic History I		Special Issues in Economic Theory	(S)
Greek Economic History II	(S)	Comparative Economic Systems	
European Economic History I		Industrial Development of Greece	
European Economic History II	(S)	International Political Economy	
Methodology of Economic Science	(S)	Political Economy of the Agricultural Sector	
Political Economy I			

b. Courses from other Departments or Faculties

 $A \ maximum \ number \ of \ 8 \ courses \ can \ be \ chosen \ from \ other \ Departments \ or \ Faculties \ of \ the \ University \ of \ Crete, as \ shown \ below:$

Department / Faculty	Maximum number of courses that can be chosen	
Department of Political Science	8	
Department of Sociology	8	
Department of Psychology	2	
Department of Primary Education	2	
Faculty of Philosophy	8	
Faculty of Sciences and Engineering	8	

7.3 POSTGRADUATE STUDIES

7.3.1 Master's Degree

In the academic year 2002-2003, the Department of Economics initiated a Master's programme in Economic Theory and Policy. The purpose of the programme is to provide the students with advanced studies in a variety of areas of economic analysis and economic policy, taking into consideration the areas of specialization of the teaching staff.

Requirements of the programme

Studies for the Master's degree in Economic Theory and Policy are completed in 12-15 calendar months. The programme begins every October and is completed by December 31 of the following year at the latest. In order to be awarded the Master's degree, students must pass examinations in eight semester-long courses and successfully complete a Master's dissertation.

The Master's Dissertation

Students who successfully complete the course work component of the programme submit a research proposal for a Master's dissertation. The Departmental Committee appoints a supervisor as well as a three-person examining committee composed of two teachers from the postgraduate programme and the supervisor.

7.3.2 Doctoral Degree

Starting in the academic year 2001-2002, the Economics Department undertook the supervision of a small number of students working toward the completion of a doctoral thesis. Every February/March, interested students are invited to submit research proposals for a doctoral thesis. A Master's

degree in a related field is a prerequisite for all applicants. A small number of applicants are accepted based on curriculum vitae and an oral interview.

Length of the programme

The doctoral thesis cannot be submitted within less than three calendar years from the date on which the Departmental Committee approves the beginning of research work for the writing of the doctoral thesis. A student who has not submitted the thesis within six years is dropped from the programme.

7.4 FACULTY MEMBERS

Professors

- Kardasis, Vassilis, Ph.D. 1986, University of Athens. Research interests: Economic history. e-mail: kardasis@econ.soc.uoc.gr, Tel: 0030 28310 77420
- Kouretas, George, Ph.D. 1988, University of Birmingham.
 Research interests: Economic theory; international economics; applied econometrics; macroeconomics of open economy.
 e-mail: kouretas@econ.soc.uoc.gr, Tel: 0030 28310 77412
- Lekakis, Joseph, Ph.D. 1982, University of Michigan, Ann Arbor.

Research interests: Economics of environment and natural resources; microeconomics; financial economics. e-mail: lekakis@econ.soc.uoc.gr, Tel: 0030 28310 77413

 Papadopoulos, Athanasios, Ph.D. 1984, University of Salford.

Research interests: Monetary theory and policy; macroeconomics; applied econometrics. e-mail: appapa@econ.soc.uoc.gr, Tel: 0030 28310 77418

Describe Former L. Di. D. 1000 Link and Collins

 Petrakis, Emmanuel, Ph.D. 1990, University of California at Los Angeles. Research interests: Noncooperative and cooperative game and bargaining theory; industrial organization theory; environmental economics; international trade theory; labour economics.

e-mail: petrakis@econ.soc.uoc.gr, Tel: 0030 28310 77409

 Xepapadeas, Anastasios, Ph.D. 1981, University of Manchester.

Research interests: Environmental and resource economics; economic theory; mathematical economics.

e-mail: xepapad@econ.soc.uoc.gr, Tel: 0030 28310 77419

Associate Professors

 Kanas, Angelos, Ph.D. 1993, University of Aston in Birmingham.

Research interests: Finance; capital markets; investments; international financial markets.

e-mail: a-kanas@econ.soc.uoc.gr, Tel: 0030 28310 77427

- Stathakis, George, Ph.D. 1984, University of Newcastle.
 Research interests: Marxist economic analysis; political economy; economic history; regional economics.
- e-mail: stathakis@econ.soc.uoc.gr, Tel: 0030 28310 77421
- Tserkezos, Dikeos, Ph.D. 1989, University of Piraeus.
 Research interests: Econometrics; statistics; time series analysis.

e-mail: tserkez@econ.soc.uoc.gr, Tel: 0030 28310 77415

Assistant Professors

- Argitis, George, Ph.D. 1996, University of Cambridge.
 Research interests: Macroeconomics; post-Keynesian economics; international political economy.
- e-mail: argi@econ.soc.uoc.gr, Tel: 0030 28310 77410
- Giannopoulos, Andreas, Ph.D. 1985, Nottingham University.

Research interests: Econometrics; time series analysis; forecasting; macroeconomic models; statistics; quantitative methods.

e-mail: ayannop@econ.soc.uoc.gr, Tel: 0030 28310 77422

- Kalaitzidakis, Pandelis, Ph.D. 1995, Columbia University.
 Research interests: Economic growth; macroeconomic analysis.
- e-mail: kalaitz@econ.soc.uoc.gr, Tel: 0030 28310 77408
- Matsaganis, Manos, Ph.D. 1992, Bristol University.
 Research interests: Public sector economics; health economics.

e-mail: Manos@econ.soc.uoc.gr, Tel: 0030 28310 77414

 Milonakis, Dimitris, Ph.D. 1989, Birbeck College, University of London.

Research interests: Marxist political economy; history of economic thought; comparative economic systems. e-mail: milonakis@econ.soc.uoc.gr, Tel: 0030 28310 77423

 Pesmazoglou, Vassilis, Ph.D. 1990, Panteion University, Athens.

Research interests: European economic integration; economic development.

e-mail: petz@econ.soc.uoc.gr, Tel: 0030 28310 77411

 Tzouvelekas, Vangelis, Ph.D. 1998, University of Wales at Aberystwyth.

Research interests: Efficiency and productivity measurement; microeconometrics; agricultural and rural economics; input-output models.

e-mail: vangelis@econ.soc.uoc.gr, Tel: 0030 28310 77417

Lecturers

 Nikolaidis, Vangelis, Ph.D. 1985, Szent Istvan University, Godollo.

Research interests: Political economy of agriculture;

agricultural development; agriculture and environment. e-mail: gkapou@econ.soc.uoc.gr, Tel: 0030 28310 77424

Specialized Teaching Staff

 Papaioannou, Evgenia, B.A. in English Language and Literature, University of Athens, M.A. 1992 in Linguistics, University of Reading.

Research interests: English for economists; English for psychologists.

e-mail: papaionj@econ.soc.uoc.gr

Stefan, Joan, B.A. University of California at Berkeley,
 M.A. 1978 in Education, San Jose State University.

Research interests: English for economists; computer-assisted language learning.

e-mail: stefan@econ.soc.uoc.gr, Tel: 0030 28310 77416

Specialized Technical Personnel

 Drakos, Periklis, B.A. in Economics, University of Patras,
 M.Sc. in Applied Statistics, Mediterranean Agronomic Institute of Chania.

e-mail: drakosp@econ.soc.uoc.gr, Tel: 0030 28310 77476

 Pigounakis, Kostas, B.A. in Naval Engineering, National Technical University of Athens, Ph.D., National Technical University of Athens.

e-mail: kpig@econ.soc.uoc.gr, Tel: 0030 28310 77444

The Department also employs Adjunct Professors on a yearly contract basis.

7.5 COMPUTER FACILITIES

Both students and staff of the Department have access to two computer laboratories for teaching and research needs. The Department of Economics operates an Interdepartmental Computer Laboratory with modern distance learning and teleconference facilities, which has close links to the modern, well-equipped Computer Laboratory operated by the Faculty of Social Sciences. The two laboratories together have 4 file servers running windows 2000/XP and over 45 compatible PCs running windows9x/2000. The PCs and file servers are connected through an EtherNet networking system. All of the PCs have software programmes for word processing, spreadsheet, database and graphics applications, while more than half of the PCs provide access to information services (such as networked databases) and Internet services (such as remote login, file transfer and World-Wide Web browsers). The computers are also used to provide individualized practice within the context of the foreign language courses.

Documents and data stored on floppy disks, CD-ROM disks, tape streamers and the Primary Domain Controller file server can be accessed from these computers. The laboratories contain high definition laser printers for Macintosh and PC computers. The printers are equipped with express Ethernet cards in order to support remote and "multiple requests" printing facilities. In addition the laboratories are equipped with DVD-rom, Color Flatbed Scanner and CD recorder.

7.6 PARTICIPATION IN EUROPEAN UNION PROGRAMMES

Like most Departments of the University of Crete, the Department of Economics participates in the Socrates Programme. It cooperates with respective faculties of other European Universities (British, Czech, French, Italian, Polish), especially in the student exchange facility.

The Department also participates in the Jean Monnet programme whose objective is to develop courses in European Studies at European Universities. In the context

of this programme the Department has been awarded a Jean Monnet Chair through which a series of seminars related to European integration have been conducted. In addition specific courses which analyze topics related to European integration have been developed.

7.7 CONFERENCES, WORKSHOPS AND SEMINARS

The Economics Department is particularly active in the organization of international conferences which provide scientists from Greece and other countries the opportunity to present their work in economics. Among the scientific meetings which the Department organized during the period 1992-2002 are the following:

October 1992: International Conference on "Marx Revisited". May, September, November 1996: The Department organized three meetings in conjunction with the Universities of Godollo and Krakow with the topic "Social and Economic Aspects of the Transition Economies in Eastern Europe". May 1996: Workshop on "The Crisis in Economic Policy: Stabilization Programmes and Greek Reality".

May 1997 to the present: The Department organizes an annual international conference on Macroeconomic Theory and Policy.

June 2000: The annual conference of the European Association for Environmental and Resource Economics (EAERE).

October 2001: The annual conference of the Association of Southern European Economic Theorists (ASSET).

March 2002: The annual conference of the European Society for the History of Economic Thought (ESHET).

The Department also organizes weekly seminars on topics of research interest to the members of the department, both staff and students.

7.8 CAREER OPPORTUNITIES FOR GRADUATES

Graduates of the Department of Economics find employment opportunities in a broad spectrum of public and private agencies, including:

- o banks, and the wider financial sector
- o accounting firms
- o local government
- o non-governmental agencies
- o research centres
- o tourism
- public administration
- business firms





8. DEPARTMENT OF PSYCHOLOGY

Departmental Secretariat

Tel: 0030 28310 77579, 77577, Fax: 0030 28310 77578

e-mail: regist@psy.soc.uoc.gr

Departmental Secretary: Anastasia-Natalia Chronopoulou

8.1 BACKGROUND OF THE DEPARTMENT

The Department of Psychology of the University of Crete is located at the Rethymno campus in Gallos, just outside the city of Rethymno. The first university-level Department of Psychology to operate in Greece, it was established and accepted its first student enrolments in 1987. The first class of graduates earned their B.A. degree in 1991.

Currently the department has 580 undergraduate students and 19 Ph.D. candidates.

8.2 UNDERGRADUATE STUDIES

8.2.1 Structure of the Programme

The department offers a Programme of Studies in psychology leading to the Bachelor's degree (B.A.). The standard period of time required to complete studies is four academic years or eight semesters. Courses offered are on a semester basis; two (thirteen week) semesters per academic year, i.e. Fall and Spring semesters. Courses are distinguished into compulsory and optional courses. Not all courses are offered on a regular basis. Courses can take the form of: i) Lecture courses, ii) Seminars, iii) Laboratories, iv) Foreign Language Instruction, v) Internship, and vi) Senior Year Dissertation. For each of the above, there may be prerequisites.



To receive the Bachelor's degree, a student must take 44 courses of which II are compulsory, four are compulsory in foreign languages, and three are related to the student's area of specialization. The remaining courses are optional courses of which at least six should be seminars. Most courses are three hours in duration per week. The Department follows the European Community Course Credit Transfer System (ECTS).

The different types of classes offered within the Department, explained in more detail, are as follows:

- i) Lecture courses provide an overall and general introduction to a particular area of study and are open to all students. Most lecture courses carry three credit units.
- ii) Seminars have prerequisites and are open mainly to 3rd and/or 4th year students and the number is limited to 25 students. In seminars students are required to research and study in depth a particular theme within a defined subject area, make a presentation on it in class, and finally, submit a term paper on the given theme at the end of the semester. Seminar titles may change to meet the developing interests of study areas. Seminars carry three credit units. iii) Laboratories have the same characteristics as seminars (described above) with the exception that laboratories have a practical and experimental character within laboratory settings. Laboratory titles may change to meet the developing interests of study areas. Each laboratory carries three credit units.
- iv) Foreign Language Instruction is open to all students. In the Department of Psychology, English is offered as a foreign language. All students must take an English Placement Test before they register for any English course, to determine their level of English and thus be placed in the appropriate course. There are two courses in English as a Foreign Language (EFL) and three courses in English for Specific Purposes (ESP). All Courses focus (in accordance with the

level of English skills) on specific subject areas and issues within psychology (e.g. General, Social, Developmental, Pedagogical, Clinical Psychology). The compulsory number of foreign language courses is four, unless placement test results lead to an exemption from the EFL courses. In such cases, students take only the three ESP courses. Foreign Language courses carry a total of six credit units.

Students may elect to take French, German or Italian courses offered by other Departments of the University. v) Internship is open only to 4th year students. In their final year of studies, students are required to do 150 hours of internship (both semesters) in Social, Clinical or Pedagogical Psychology. It is recommended by the Department that students choose two of the three areas (75 hours in each). The Internship is carried out in various institutions in applied psychology (e.g. in counselling centres, health facilities, psychiatric institutions, research centres, work centres, schools, hospitals). Students who wish to do their Internship must satisfy the prerequisites for each area that are listed below:

- Social Psychology Internship Course: General Psychology I, Social Psychology III (Practice and Application), Methodology of Scientific Research I.
- Clinical Psychology Internship Course: Clinical Psychology: Theories of Personality, Adult Psychopathology I, Psychometrics I.
- Pedagogical Psychology Internship Course: Pedagogical Psychology I, II & III, Developmental Psychology I & II, any Seminar in Pedagogical Psychology.
- vi) Senior Year Dissertation is open only to 4th year students. Students in their final year of studies are required to write a dissertation on a specific topic within their major, under the supervision and guidance of a teaching staff member,

serving as an advisor. The dissertation must incorporate and present the student's theoretical, methodological and research ability and knowledge of the topic that has been selected.

8.2.2 Undergraduate Courses

The undergraduate courses offered by the Department of Psychology, by subject area, are listed below.

DEVELOPMENTAL PSYCHOLOGY

Developmental Psychology I Developmental Psychology II

Developmental 1 sychology ii

Developmental Psychology: Pregnancy and Giving Birth Seminar in Developmental Psychology: Fathering and Its Implications in Infant Development

Current Theories and Research Data in Developmental Psychology

METHODOLOGY AND EXPERIMENTAL PSYCHOLOGY

Methodology of Scientific Research

Introduction to Research Methodology in Psychology I

Experimental Psychology I Experimental Psychology II Experimental Psychology Labs

Psychology of Motivation

Psychology of Emotion and Motivation

Cognitive Psychology

Seminar in Cognitive Psychology: Self-Initiated Learning

CLINICAL PSYCHOLOGY

Theories of Personality

Clinical Psychology I: Adulthood Psychopathology Clinical Psychology II: Childhood Psychopathology Psychotherapeutic Strategies

Seminar in Psychoanalytic Technique: Theoretical Constructs and Practical Applications

The Psychopathology of the Adult Personality: Psychoanalytic Perspectives

Systemic Theory and the Family

Seminar in Clinical Psychology: Chronic Illness in Childhood and Adolescence

Psychodiagnostic Methods I Psychodiagnostic Methods II

Laboratory in Rorschach Testing: Theoretical Principles and Clinical Applications

Seminar in Clinical Psychology: Psychological and Physical

Pain-Psychoanalytic Frameworks

Laboratory in Clinical Psychology: Mechanisms in the Genesis and Therapy of Anxiety

NEUROSCIENCES

Introduction to Neurobiology and Genetics

Behaviour Genetics

Comparative Psychology

Neuropsychology

Neuropsychopharmacology

Seminar in Biopsychology: The Biopsychology of Anxiety

Physiological Psychology I Physiological Psychology II

Laboratory: Basic Techniques and Methods in Brain and

Behavioural Research

Laboratory in Neuropsychology: Evoked Potentials in Lie

Detection

SOCIAL PSYCHOLOGY

Introduction to Social Psychology I

Social Psychology II: Social Influence and Communication

Social Psychology III: Applications Elements of Social Psychiatry Special Issues in Social Psychology

Laboratory in Social Psychology: Psychology and Social

Exclusion

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Laboratory in Social Psychology: Psychology of the Family

The Psychology of Discrimination

Critical Psychology

Laboratory: Immigrants in the Local Community

STATISTICS

Statistics I

Statistics II

COUNSELLING PSYCHOLOGY

Counselling Psychology I
Counselling Psychology II

Seminar in Counselling Psychology: From Theory to Practice Seminar in Counselling Psychology: The Therapeutic

Relationship

EDUCATIONAL AND SCHOOL PSYCHOLOGY

Educational Psychology I Educational Psychology II

Seminar in Educational Psychology: Evaluation I Seminar in Educational Psychology: Evaluation II

Introduction to School Psychology

School Psychology II: Reading, Writing and Dyslexia Seminar in School Psychology: Cognitive, Verbal and other Developmental Disabilities of Speech and Communication Laboratory in School Psychology: From Theory to Practice-Evaluation of Reading and Spelling Abilities

ORGANIZATIONAL PSYCHOLOGY

Organizational Psychology Environmental Psychology

FORENSIC PSYCHOLOGY

Forensic Psychology
Elements of Criminology
Seminar in Forensic Psychology: Children as Victims and

Perpetrators

Suicide and the Law

PSYCHOLOGY—PHILOSOPHY AND HISTORY

Philosophy and Psychology Cultural and Historical Aspects of Vygotsky's Contributions History of Psychology Introduction to Philosophy

COURSES IN OTHER SUBJECT AREAS OF PSYCHOLOGY

Political Psychology

Occupational Psychology

Clinical Health Psychology

Codes of Ethics and Principles of Practice in Psychology

Intelligence Measurement and Testing

Emotional Intelligence

Non-Verbal Communication in Interpersonal Relationships

The Psychology of Mourning and Loss

Mental Retardation

FOREIGN LANGUAGE COURSES

English Language: Trends and Characteristics of Greek

Society

English Language: Terminology and Vocabulary in the

Neurosciences

English Language: Terminology and Vocabulary in

Developmental Psychology

English Language: Terminology and Vocabulary in Clinical

Psychology

English Language: Advanced Academic English

8.3 POSTGRADUATE STUDIES

The department operates an M.Sc. programme in Clinical Psychology, which is to be restructured during 2003-04, to incorporate additional fields of specialization. Ph.D. candidates are admitted depending on their research interests and those of the staff.

8.4 FACULTY MEMBERS

Professors

Nestoros, Ioannis N., Ph.D. 1980, McGill University.
 Research interests: Integrative psychotherapy of individuals with paranoid schizophrenic symptoms; the role of anxiety in psychopathology; neuropsychopharmacology; neuroscientific models of normal and abnormal psychological status.
 e-mail: nestoros@psy.soc.uoc.gr, Tel: 0030 28310 77527

Associate Professors

 Rigas, Anastasia-Valentini, Ph.D. 1983, University of Paris VII.

Research interests: Field research and qualitative research methods, with emphasis on families in crisis; case studies with emphasis on the directed reverie of Robert Desoille; projective testing (e.g., the test ADIT); psychogrammatic representations of relations between generations; European Programmes of Support for socially disadvantaged groups; the ego-ecological perspective.

e-mail: riga@psy.soc.uoc.gr, Tel/Fax: 0030 28310 77541

Assistant Professors

 Hatira, Kalliopi, Ph.D. 1986, University Louis Pasteur of Strasbourg.

Research interests: Pain (somatic and psychic): psychodynamic approach; post traumatic syndrome: psychodynamic approach; psychodynamic approach to health psychology; psychodynamics of cancer in children and adolescents; drawing (HPT: Hatira's Projective Technique) as a diagnostic and therapeutic instrument.

e-mail: hatira@psy.soc.uoc.gr, Tel: 0030 28210 50377

- Kastellakis, Andreas A., Ph.D. 1987, University of Patras. Research interests: Interaction of dopaminergic system with other neuroactive-psychotropic substances (thyroid hormones, somatostatin, opiates, psychostimulants) and with biopsychology-psychopharmacology of addiction. e-mail: kastellakis@psy.soc.uoc.gr, Tel: 0030 28310 77540
- Marvakis, Athanasios, Ph.D. 1995, Eberhard-Karl University of Tübingen.

Research interests: Youth as a social group; psychology and its relationships to the various forms of social inequalities and social exclusion (racism, nationalism, ethnicism, multiculturalism); solidarity as a theoretical and practical issue in the social sciences; the theoretical constitution of social psychology.

e-mail: Marvakis_Ath@psy.soc.uoc.gr, Tel: 0030 28310 77525

 Mellon, Robert, Ph.D. 1987, University of North Carolina at Greensboro.

Research interests: Experimental analysis of behaviour; applied behaviour analysis; philosophy of science; stimulus control; quantitative models of behaviour, behavioural assessment and psychometrics; experimental psychology research in psychotherapy; anxiety disorders; stereotypy and variability of behaviour; resistance to change. e-mail: mellon@psy.soc.uoc.gr, Tel: 0030 28310 77535

• Triliva, Sofia, Psy. D. 1990, Rutgers University. Research interests: Coping and adjustment in the context of long-term familial relationships; the adjustment and bolstering of the emotional well-being of children; adolescents and their parents; the creation of effective mental health prevention programming for children and adolescents. e-mail: triliva@psy.soc.uoc.gr, Tel: 0030 28310 77542

Lecturers

- Konnikaki, Theano, Ph.D. 1998, University of Edinburgh. Research interests: Traditional and modern theoretical and empirical work on interaction of mother-infant, father-infant, grandmother-infant, twins; triadic interactions of family members; comparisons of patterns of parent- or grandparent-infant interactions in several cultural contexts or in urban and rural areas of the same culture.
 e-mail: nina@psy.soc.uoc.gr, Tel: 0030 28310 77536, 2810 319379
- Nikolopoulos, Dimitris, Ph.D. 1999, University College London.

Research interests: The development of reading and spelling abilities in the Greek and other orthographic systems; the manifestation of dyslexia and other reading disabilities in different orthographic systems; the development of metacognitive skills and their contribution to the development of literacy skills in normal and clinical populations.

Tel: 0030 28310 77538

- Panagis, George, Ph.D. 1996, University of Crete. Research interests: Neural basis of brain stimulation reward; interactions between drugs of abuse and brain reward systems; psychopharmacology of nicotine; the role of endogenous cannabinoid system in behaviour and reward. e-mail: panagis@psy.soc.uoc.gr, Tel: 0030 08310 77544
- Vallianatou, Dionisia, Ph.D. University of Crete. Research interests: Clinical neuropsychology including testing and neuropsychological rehabilitation, neuropsychological models of normal and abnormal psychological states and human developmental neuropsychology; clinical and research work based on applying modern electrophysiological approaches in the event-related potentials (ERPs). e-mail: vallianatou@psy.soc.uoc.gr, Tel: 0030 08310 77529

Specialized Teaching Staff

- Kondoroussi-Karageorge, Anna, B.A. Hellenic College, M.Sc. 1981 in Multilingual, Multicultural Education (English as Second/Foreign Language), Florida State University.
 Research interests: English for psychologists, e-mail: annakk@psy.soc.uoc.gr, Tel: 0030 28310 77531
- Papaioannou, Evgenia, B.A. in English Language and Literature, University of Athens, M.A. 1992 in Linguistics, University of Reading.

Research interests: English for economists, English for psychologists.

e-mail: papaionj@econ.soc.uoc.gr

The Department also employs Adjunct Professors on a yearly contract basis.

9. DEPARTMENT OF POLITICAL SCIENCE

Departmental Secretariat

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e-mail: neonaki@pol.soc.uoc.gr

Departmental Secretary: Maria Neonaki-Karagiannaki

9.1 BACKGROUND OF THE DEPARTMENT

The Department of Political Science of the University of Crete, located at the Rethymno campus in Gallos, offers courses and supervision in the major areas of contemporary political science. Unlike other Political Science divisions in Greek universities, the Department of Political Science at the University of Crete was established and developed with the explicit aim of serving political science as an academic discipline independent of constitutional and public law. The first class of students was admitted to the Department in 1999; the number of undergraduate students now numbers 436, while the Department also has 4 Ph.D. students.

9.2 UNDERGRADUATE STUDIES

The Department of Political Science is committed to offering a programme of study which combines systematic exploration of the particular academic fields within the discipline (such as political theory, public policy, comparative politics, political culture) with the acquisition of transferable skills (training in foreign languages, computers, qualitative and quantitative methodology). Study and research in the Department is organized in three main concentrations:

 Political Theory and Public Policy (including the history of political thought, political theory, political philosophy,



rights, ethics, theory of democracy, social theory, liberalism, Marxism, conservatism, public policy analysis, policy implementation studies, state theory, political economy, the budgetary process, administrative systems, social policy, health policy, educational policy)

- Comparative and European Politics (including Greek politics, electoral studies, political parties, interest groups, political systems of Western Europe, political systems of Southern Europe, the European Union, EU policies and politics, processes of Europeanization, theory of European integration, the political system of the United States of America, comparative political culture, politics and the media)
- Political and Historical Sociology (including political sociology, historical sociology, Greek political history, European historical development, social theory, social movements, political protest, social change, theory and analysis of revolutions, political communications, globalization and its discontents)

Apart from a core of compulsory courses on key aspects of political science and political sociology, the Department offers a variety of possibilities for students to structure their own flexible programme of study, leading to a senior year dissertation on a topic of their choice. The Department maintains links with universities in other EU member states and there is an active student exchange programme. The Department's academic members are active in research and publications on a national and international level; a political science journal has its basis in the Department.

9.3 FACULTY MEMBERS

Associate Professors

 Alexandropoulos, Stelios, Ph.D. 1990, Panteion University, Athens.

Research interests: Collective action; social movements; political sociology; social theory.

e-mail: alex@pol.soc.uoc.gr, Tel: 0030 28310 77442

 Gravaris, Dionyssis, Ph.D. 1991, Panteion University, Athens.

Research interests: State theory; public policy; public finance; social policy.

Tel: 0030 28310 77449

 Kotroyannos, Dimitris, Ph.D. 1988, University of Strasbourg.

Research interests: Political philosophy; ethics; human rights; applied political theory.

Tel: 0030 28310 77448

• Lavdas, Kostas A., Ph.D. 1996, University of Manchester. Research interests: Comparative politics; interest groups; European Union; applied political theory.

e-mail: lavdas@pol.soc.uoc.gr, Tel: 0030 28310 77453

 Margaritis, Giorgos, Doctorat d' etat 1981, University of Nice.

Research interests: Political history; Greek historical development; civil war; military history.

Tel: 0030 28310 77441

• Mendrinou, Maria, Ph.D. 1996, University of Manchester. Research interests: Public policy; policy implementation; European Union; comparative electoral politics.

Tel: 0030 28310 77461

Assistant Professors

- Georgantas, Elias, Ph.D. 1990, Sussex University. Research interests: Local politics and political economy; comparative public policy; applied social and political theory. e-mail: elgeo@pol.soc.uoc.gr, Tel: 0030 28310 77458
- Giouras, Thanassis, Ph.D. 1993, Universitaet Frankfurt am Main.

Research interests: Social and political theory; history of political thought; democracy; public finance.

e-mail: Giouras@pol.soc.uoc.gr, Tel: 0030 28310 77510

 Marias, Epameinontas, Ph.D. 1993, Panteion University, Athens.

Research interests: Theory of European integration; European Union; Greek-Turkish relations.

e-mail: e-marias@pol.soc.uoc.gr, Tel: 0030 28310 77512

Lecturers

• Alexopoulos, Nektarios, Ph.D. 2000, European University Institute. Florence.

Research interests: Public policy; political analysis and methodology; European Union.

e-mail: alexopou@otenet.gr, Tel: 0030 28310 77460

 Mavromoustakou, Ivi, Doctorat d' Etat 1989, University of Paris II.

Research interests: Greek political system; parliaments and parties; comparative constitutional history; public law. e-mail: mavro@pol.soc.uoc.gr, Tel: 0030 28310 77512

Papadakis, Nikos, Ph.D. 2001, University of Crete.
 Research interests: Social policy; comparative educational policy; applied social and political theory; social and political methodology.

e-mail: nep@pol.soc.uoc.gr, Tel: 0030 28310 77457

Serdedakis, Nikos, Ph.D. 1996, University of Crete.
 Research interests: Social movements; political sociology; applied social theory.
 e-mail: nserd@social.soc.uoc.gr, Tel: 0030 28310 77511

Specialized Teaching Staff

• Ammari, Maria, M.A. 1995 in Diplomatic Studies, University of Westminster; M.A. 1996 in Learning and Teaching English, University of London; M.A 1999 in Civilization and New Technologies, University of the Aegean. Research interests: English for specific purposes. e-mail: amari@social.soc.uoc.gr, Tel: 0030 28310 77473

 Hila, Marina, M.A. University of Warwick, Ph.D. 1998 in English and Related Literature, University of York.
 Research interests: English for political scientists.
 e-mail: hila@pol.soc.uoc.gr, Tel: 0030 28310 77461

The Department also employs Adjunct Professors on a yearly contract basis.





FACULTY OF SCIENCES AND ENGINEERING

DEPARTMENTS:

- **+** Mathematics
- **+** Physics
- **+ Computer Science**
- + Biology
- **+** Chemistry
- **+** Applied Mathematics
- → Materials Science and Technology



Departmental Secretariat

Tel: 0030 2810 393801, Fax: 0030 2810 393881

Departmental Secretary: Marina Chourdaki

10.1 BACKGROUND OF THE DEPARTMENT

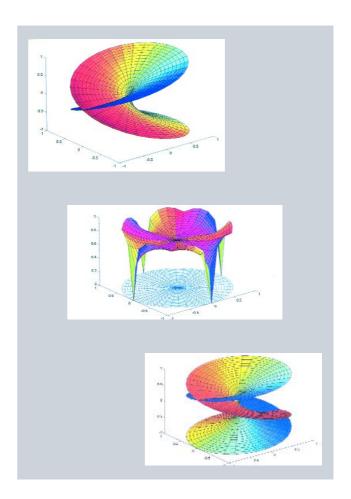
Since its foundation in 1977, the Department of Mathematics has functioned in a way unique among other Greek Departments of Mathematics. A basic characteristic of the Department is the flexibility of the Programme of Studies, which offers students a wide variety of choices among courses related to different areas of Mathematics and its modern applications. The Department has also been a pioneer in postgraduate studies, establishing in 1984 the first organised Postgraduate Programme in Mathematics in Greece.

After more than 25 years, the Department has 24 tenure track faculty members, 8 visiting professors, 45 postgraduate students and about 500 undergraduate students.

The Department is currently located at the Knossos Avenue Campus, near the Minoan archaeological site. New facilities are now under construction at the new University Campus in the area of Voutes, less than 10 km south-west of Heraklio. The Department will move there as soon as construction is completed.

10.2 UNDERGRADUATE STUDIES

The undergraduate Programme of Studies of the Department of Mathematics consists of a relatively small



number of compulsory courses whose purpose is, on the one hand, to introduce the students to the basic techniques and the fundamental concepts of Mathematics and, on the other, to offer familiarity with computers and their use in contemporary technology. The optional courses, which begin in the second semester of studies, cover the entire syllabus after the second year and include all the branches of Mathematics (Algebra, Analysis, Geometry, Statistics and applied subjects such as Biomathematics, Geophysics and Mathematical Models). Up to one-fourth of the courses required for the degree can be chosen from those offered by other Departments of the University. The variety of courses offered by the Department allows the graduates of the Department to become appropriately prepared according to their individual interests, in order to be employed in various positions for which personnel with increased abilities in terms of quantitative perception and logical analysis is required, or to attend postgraduate studies in sciences, for which a high mathematical standard is essential. For those interested in Postgraduate Studies in Mathematics and its applications, the Department offers a parallel, more demanding, syllabus.

Studying in the Department of Mathematics allows students to follow specializations adapted to cutting-edge technologies and areas of increased demand for scientists. Among these is the specialization in "Mathematical Geophysics" which aims at training students in mathematical methods of confronting problems related to the study of the environment.

Academic counselling is available in the first two years of study to help the students select the appropriate subjects according to their aptitude and interests. First-year students, in small groups of 4-5 individuals, have weekly meetings with faculty members (tutorials); they also participate in a weekly day-long "Exercises Laboratory", run under the

supervision of faculty members and postgraduate or advanced undergraduate students.

Advanced undergraduate students are encouraged to participate, in return for a small compensation, in the training of the younger students, by teaching them exercises in various courses, which is a valuable experience for their future career. The students also have the possibility of attending one semester abroad, in one of the European Union Universities which collaborate with the Department under the framework of the European programme Socrates.

During their undergraduate studies in the Department of Mathematics, students are offered the possibility of receiving training for three months, working in companies or other institutions that could possibly become their future employers.

10.3 POSTGRADUATE STUDIES

The Department was one of the first in Greece to have a structured Postgraduate Programme of Studies, leading to a Master's degree or Ph.D. So far, the Department has awarded 44 M.A. degrees and 18 Ph.D. degrees. The standards for awarding postgraduate degrees are high by international standards, especially those for a Ph.D.

Recently, the Postgraduate Programme was revised to provide a programme common to that which is offered by the Department of Applied Mathematics of the University of Crete, so that a postgraduate student can now choose among the following directions leading to a Master's degree:
(a) Pure Mathematics, (b) Mathematical Simulation and Computational Techniques, (c) Financial Mathematics, (d) Mathematical Foundations of Information Science and Applications, (e) Mathematics for Education.

Postgraduate students have a very high probability of receiving a fellowship as an aid to their studies. In addition, at least three honorary fellowships (one of which is awarded in memory of the late Professor S. K. Pichoridis, a prime founder of the Postgraduate Programme of the Department) are granted to the top postgraduate students. Many students with a specialisation in Applied Mathematics are supported financially by the Foundation for Research and Technology Hellas (FORTH), which closely interacts with the Department.

Ten postgraduate modules of six-month duration are usually offered every year in a range of fields in Mathematics, applied or pure. Many of these modules are taught by distinguished visiting professors from various well known Universities and Research Centres around the world.

10.4 FACULTY MEMBERS

Professors

Antoniadis, Jannis (Division of Algebra - Geometry),
 Ph.D. 1981, University of Cologne.

Research interests: Number theory; cryptography. e-mail: antoni@math.uoc.gr, Tel: 0030 2810 393831

- Athanasopoulos, Ioannis (Division of Applied Math -Statistics), Ph.D. 1979, University of Illinois at Chicago.
 Research interests: Partial differential equations, free boundary value problems.
- e-mail: athana@math.uoc.gr, Tel: 0030 2810 392870
- Papadakis, Ioannis (Division of Applied Math Statistics),
 Ph.D. 1971, Polytechnic University of New York.
 Research interests: Differential equations.
 e-mail: papada@math.uoc.gr, Tel: 0030 2810 393874
- Papadopoulou, Souzana (Division of Analysis), Ph.D.
 1970, University of Athens.

Research interests: Functional analysis; convexity. e-mail: souzana@math.uoc.gr, Tel: 0030 2810 393832

 Tzanakis, Nikos (Division of Algebra - Geometry), Ph. D. University of Athens. Research interests: Number theory (explicit solution of Diophantine equations).

e-mail: tzanakis@math.uoc.gr, Tel: 0030 2810 393839

Associate Professors

 Athanasopoulos, Konstantin (Division of Algebra -Geometry), Ph.D. University of Athens.

Research interests: Dynamical systems; differential geometry and topology; ergodic theory.

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Giannopoulos, Apostolos (Division of Analysis), Ph.D.
 1993, University of Crete.

Research interests: Convex geometry.

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Katsoprinakis, Emmanuil (Division of Analysis), Ph.D.
 1988, University of Crete.

Research interests: Harmonic analysis; complex variables. e-mail: katsopr@math.uoc.gr, Tel: 0030 2810 393850

Klonias, Vassilis (Division of Applied Math - Statistics),
 Ph.D. 1981, University of Rochester.

Research interests: Statistics.

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 Kolountzakis, Mihalis (Division of Analysis), Ph.D. 1994, Stanford University.

Research interests: Harmonic analysis; combinatorial problems; computation.

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Kossioris, Georgios (Division of Applied Math - Statistics),
 Ph.D. 1991, Brown University.

Research interests: Nonlinear partial differential equations and applications.

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Kouvidakis, Alexandros (Division of Algebra - Geometry),
 Ph.D. 1990, Harvard University.
 Research interests: Algebraic geometry.
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 Lambrou, Michael (Division of Analysis), Ph.D. 1977, King's College, University of London.
 Research interests: Functional analysis.
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Pamfilos, Paris (Division of Algebra - Geometry), Ph.D.
 1978, University of Cologne.
 Research interests: Geometry.
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Papadimitrakis, Mihalis (Division of Analysis), Ph.D. 1987, University of California at Los Angeles.
 Research interests: Harmonic analysis; complex analysis.
 e-mail: papadim@math.uoc.gr, Tel: 0030 2810 393853

Pheidas, Athanasios (Division of Analysis), Ph.D. 1985,
 Purdue University.

Research interests: Mathematical logic and applications to algebra and number theory.

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Taroudakis, Mihalis (Division of Applied Math - Statistics),
 Ph.D. 1988, National Technical University of Athens.
 Research interests: Mathematical modelling of physical problems.

e-mail: taroud@math.uoc.gr, Tel: 0030 2810 393880

Tersenov, Alkis (Division of Applied Math - Statistics),
 Ph.D. 1991, University of Novosibirsk.

Research interests: Partial differential equations. e-mail: tersenov@math.uoc.gr, Tel: 0030 2810 393873

Tertikas, Achilles (Division of Applied Math - Statistics),
 Ph.D. 1987, Herriot Watt University.

Research interests: Partial differential equations. e-mail: tertikas@math.uoc.gr, Tel: 0030 2810 393876

Vavalis, Emmanuel (Division of Applied Math - Statistics),
 Ph.D. 1986, University of Thessaloniki.

Research interests: Numerical analysis; scientific computing. e-mail: mav@math.uoc.gr, Tel: 0030 2810 393805

Assistant Professors

Athanasiadis, Christos (Division of Algebra - Geometry),
 Ph.D. 1996, M.I.T.

Research interests: Combinatorics; discrete geometry. e-mail: chrisk@math.uoc.gr, Tel: 0030 2810 393828

Kourouniotis, Christos (Division of Algebra - Geometry),
 Ph.D. 1984, King's College, University of London.
 Research interests: Geometry.
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Skandalis, Constantine (Division of Analysis), Ph.D.
 1981, University of Wroclaw.

Research interests: Mathematical logic. e-mail: kostek@athina.edu.uoc.gr, Tel: 0030 2810 393827

Lecturers

Kritikou, Doukissa (Division of Applied Math - Statistics),
 Ph.D. 1981 and 1986, University of Rouen.

Research interests: Statistics.

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Emeriti

- Apostolos Hadjidimos, Professor Emeritus Research interests: Numerical analysis.
- Nicholas Petridis, Professor Emeritus Research interests: Geometry.

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

10.5 RESEARCH

The Department of Mathematics is research-oriented and most of its members' names appear regularly in international research journals. Several faculty members are members of the Institute for Applied and Computational Mathematics of the FORTH and/or participate in international Research Networks. During the semester, teachers and students hold weekly research seminars on a number of topics. Members of the Department regularly organise, locally, a number of international conferences, funded by the University and often by the European Union.

A Distinguished Visiting Professorship in Mathematics is funded every year by the FORTH in memory of the late Professor Pichoridis. The Professorship has been used so far by (in chronological order) M. Crouzeix (Rennes), D. Zagier (Bonn), J.-P. Kahane (Paris), A. Baernstein (St. Louis), P. Souganides (Madison), V. Thomee (Göteborg), M. Gryllakis (Maryland), V. Milman (Tel Aviv), K. Dafermos (Brown), J. Coates (Cambridge), D. Masser (Basel), P. Plotnikov (Novosibirsk), J. Ball (Oxford), L. Bjørnø (Lyngby), A. Pelczynski (Warsaw), and R. Schneider (Freiburg).

10.6 FACILITIES

A significant number of courses offered by the Department require the systematic use of computers as part of their laboratory practice. In order to support laboratory practice, the Department has at its disposal two modern classrooms with a seating capacity of 50 in total and it is equipped with

printers, overhead projectors, video projectors and so forth, while for research purposes there are two additional research laboratories.

The offices of the teaching and research staff, the administration and most of the postgraduate students are equipped with personal computers connected to the Internet, while all the members of the Department have access to the computer systems and services of the University's Computer Centre.

An integral part of the Department's activity is the University Library, situated at the Knossos Avenue campus. The library provides more than 25,000 books in the fields of Mathematics, Computer Science, Physics, Chemistry and Biology. It also has 628 scientific journals, as well as information resources, a reserved collection of books, and electronic resource materials.

10.7 ADDITIONAL ACTIVITIES

In an attempt to attract the attention of people who are interested in Science and Mathematics, the Department organises lectures open to the public on issues related to Mathematics of general interest. The first such series of six lectures took place in the academic year 2000-2001 and was particularly successful. At the same time, the Department supports the efforts of the Greek Mathematical Society to promote better mathematics education in the secondary schools, with some members of the Department participating in the activities of the Society including the setting up of prizes for students who are successful in its competitions.

Soon the sports hall and the swimming pool of the University will be completed, giving a boost to the athletic activities of the academic community. The Department of Mathematics supports the involvement of the students in various cultural activities, such as theatre, music, photography, and art.

10.8 CAREER OPPORTUNITIES FOR GRADUATES

The students of the Department can elect to prepare for a career in education by attending courses for Mathematics Education in the Department, as well as other pedagogical courses offered by the Department of Education. Despite the fact that most of the graduates of the Department continue to find employment in the educational sector, there is a constantly increasing number employed in the economic sector. In a recent study conducted among the graduates of the period 1981-1997, it was estimated that about 60% were occupied in education (public or private, tutorial schools, institutions of higher education), while a significant number of the remaining students were working in banks, insurance companies, businesses relating to new

technology, media, and so forth. The philosophy of the Programme of Studies takes into account the prediction that the development of the Greek economy within a common European market will increase the need for high quality personnel, familiar with the new technologies, capable of analysing problems and formulating them in a mathematical way, and able to use current techniques for their solution. Considerable effort is being made to ensure that graduates have all the qualifications to distinguish themselves in the new conditions in the job market.

All of the Department's graduates with a doctorate have found employment in Universities or research institutions, in either regular or visiting positions.



11. DEPARTMENT OF PHYSICS

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Departmental Secretariat

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Departmental Secretary: Andriani Armenaki-Koutentaki

II.I BACKGROUND OF THE DEPARTMENT

The Department of Physics received its first undergraduate students in 1978. Today it numbers 30 faculty members and about 25 scientists in visiting or project-funded positions; it has about 550 undergraduate students and 95 postgraduate students. Housed in temporary buildings near Knossos during its first years of operation, the Department moved to its permanent campus at Voutes, on the hills some ten kilometres south-west of the city of Heraklio, in 1995.

Besides its teaching and administrative responsibilities, the faculty engages in the fields of research described below:

- o Nuclear and elementary particle physics
- o Atomic and molecular physics
- o Condensed matter physics
- o Applied physics
- o Astrophysics and space physics

Over the years the Department of Physics has developed a close and productive collaboration with the Institute of Electronic Structure and Laser of the Foundation for Research and Technology Hellas (IESL-FORTH), while at the same time having collaborative research links with several other research establishments in Europe and overseas. The Department is also host to the Crete University Press, a



publishing organization founded in 1985 with the support of the Pancretan Association of America.

11.2 UNDERGRADUATE STUDIES

About eighty students yearly enter the undergraduate programme to follow an eight-semester curriculum as follows: Introductory stage: (3 semesters) Introductory courses in Physics and Mathematics, aimed at allowing the student to gain familiarity with the physics labs, and with the use of computers, as well as with at least one foreign language. Fundamental stage: (3 semesters) Basic courses aimed at a deeper understanding of subjects such as Classical Mechanics, Electrodynamics, Thermodynamics, Statistical Physics, and Quantum Physics, in addition to bringing the student closer to laboratory.

Advanced stage: (2 semesters) The student applies the basic knowledge thus far acquired in various fields of physics and technology, and comes into further contact with the research laboratories.

Appropriate choice of selective courses offers students the possibility of an introductory specialization in Microelectronics, in Optoelectronics and Lasers, or in Applied and Computational Science.

11.3 POSTGRADUATE PROGRAMME

Two distinct Postgraduate Programmes are presently administered by the Department of Physics, both leading to degrees at the M.Sc. and Ph.D. levels:

- Postgraduate Studies in Physics (started in 1984)
- Postgraduate Studies in Microelectronics and Optoelectronics (started in 1998)

Postgraduate students are solicited among the graduating students of the leading Greek universities. They are admitted once a year on the basis of their undergraduate record and their success in the graduate entrance exams organized every April. As an alternative, a number of new students are admitted on the basis of their performance on the final exams of the *Summer School in Advanced Physics*. The Summer School is organized every July by the Department and attracts advanced undergraduate students from all over Greece who demonstrate criteria of excellence.

11.3.1 Postgraduate Studies in Physics

The programme is structured in two levels, as follows:

a. Postgraduate Diploma of Specialization (PDS)

This is a programme of regularly offered postgraduate courses (2-4 semesters), eventually combined with some participation in research, leading to a PDS degree at the M.Sc. level. The PDS may be awarded in Physics, or in one of the sub-disciplines covered by the research groups of the Department. These courses have two objectives belonging in the:

Core curriculum: to equip students with a thorough understanding of the basic theories of Physics (Mechanics, Electrodynamics, Quantum Theory, Statistical Physics, Many Body Theory, Mathematical Methods in Physics), or the Specialty curriculum: to initiate students in the necessary knowledge for specialization, and research through postgraduate courses in Atomic, Molecular and Laser Physics, Condensed Matter Physics, Astronomy and Astrophysics, Quantum Field Theory, High Energy Physics, General Relativity and Cosmology, Nonlinear Physics, Computational Physics, Atmospheric and Ionospheric Physics and so on. More than 104 postgraduate students have been awarded a PDS thus far.

b. Doctoral Degree (Ph.D.)

This is a programme of supervised research work (2-4

years) within a research group of the Department, eventually combined with some specialty courses, leading to the Doctoral Degree at the Ph.D. level. Students wishing to follow this programme have to successfully pass the Graduate Qualifying Exams, offered once or twice a year. To date, 42 postgraduate students have been awarded a Doctoral Degree.

Postgraduate studies in Physics are supported by an up-to-date library, and direct access to electronic data bases at corresponding libraries in Greece and abroad. The computational facilities of the Department are up-to-date. Beyond the common-room terminals, each postgraduate student's office is equipped with one or two personal computers. The experimental facilities for Laser Physics, mostly shared with IESL-FORTH, are outstanding. Students interested in observational Astrophysics benefit from the activities at Skinakas Observatory. Nearly all postgraduate students obtain a teaching assistantship or a fellowship.

11.3.2 Postgraduate Studies in Microelectronics-Optoelectronics

The programme was initiated in 1998 jointly by the Department of Physics of the University of Crete (UOC) and IESL-FORTH. This programme also leads to M.Sc. and Ph.D. degrees with emphasis on the former.

The purpose of the programme is to provide scientists and engineers with a solid background and research training in advanced electronic and photonic applications. The courses cover topics in quantum physics, lasers and optics, microelectronic devices, materials science and system design and analysis techniques.

An excellent research environment is available within a number of well-equipped laboratories active in the thematic areas of the programme. The Microelectronics Research Group (UOC and IESL-FORTH) specializes in epitaxially grown compound semiconductors. The Laser lab of IESL-FORTH is active in many areas of laser physics and applications and houses a large European Research Facility on UV lasers. The Materials Group of IESL covers several research areas in advanced materials, such as magnetic and superconducting materials, photonic materials, thin films, polymers and nanoscale materials. Several dozen senior researchers work in these labs and many serve as research supervisors to the students in the postgraduate programme in Microelectronics-Optoelectronics. These labs also frequently host visiting scientists from other EU countries and from around the world. The collaboration of the postgraduate students with these visitors has often provided very interesting job opportunities to the former, as witnessed by several success stories of this nature.

The M.Sc. curriculum includes two or three semesters of postgraduate classroom, lab and reading courses as well the preparation of an M.Sc. dissertation. Ph.D. candidates must hold an M.Sc. degree in Physics or in another discipline related to Microelectronics and Optoelectronics, such as Electrical Engineering and Materials Science. Ph.D. candidates must also successfully pass the Graduate Qualifying Exams of the programme. In the first four years of operation of the programme, 23 M.Sc. and 9 Ph.D. degrees were awarded.

11.4 FACULTY MEMBERS

Professors

Economou, Eleftherios (Condensed Matter Division),
 Ph.D. 1969, University of Chicago.

Research interests: Wave propagation in ordered and disordered media.

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Fotakis, Costas (Atomic and Molecular Physics Division),
 Ph.D. 1977, University of Edinburgh.

Research interests: Laser photophysics; laser interactions with materials.

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 Grammatikakis, Giorgos (High Energy and Elementary Particle Physics Division), Ph.D. 1973, University of London (Imperial College).

Research interests: High energy physics. e-mail: grammat@physics.uoc.gr, Tel: 0030 2810 394303

Kelires, Pantelis (Condensed Matter Division), Ph.D.
 1987, New York State University at Albany.

Research interests: Computational condensed matter physics; semiconductors.

e-mail: kelires@physics.uoc.gr, Tel: 0030 2810 394223

• Kiritsis, Elias (High Energy and Elementary Particle Physics Division), Ph.D. 1988, California Institute of Technology. Research interests: String theory and quantum field theory in general; in particular non-perturbative aspects of supersymmetric theories; supersymmetry breaking, duality, conformal field theory, gauge theory, gravity and black holes, cosmology.

e-mail: kiritsis@physics.uoc.gr, Tel: 0030 2810 394209

Kylafis, Nikolaos (Astrophysics and Space Physics Division),
 Ph.D. 1978, University of Illinois.

Research interests: Theoretical astrophysics: compact X-ray sources, galaxies, masers, radiation transport. e-mail: kylafis@physics.uoc.gr, Tel: 0030 2810 394215

 Lambropoulos, Panayotis (Atomic and Molecular Physics Division), Ph.D. 1965, University of Michigan.
 Research interests: Laser-matter interactions.
 e-mail: labro@iesl.forth.gr, Tel: 0030 2810 394304

· Papanikolaou, Nicolas (High Energy and Elementary

Particle Physics Division), Ph.D. 1975, New York University. Research interests: Magnetism and magnetic materials; Bose-Einstein condensates; nonlinear dynamical systems. e-mail: papanico@physics.uoc.gr, Tel: 0030 2810 394202

• Tomaras, Theodore (High Energy and Elementary Particle Physics Division), Ph.D. 1980, Harvard University. Research interests: Phenomenological implications of string theory; brane-world cosmology with large extra dimensions; solitons in particle and condensed matter physics; quantum field theory; quantum gravity.

e-mail: tomaras@physics.uoc.gr, Tel: 0030 2810 394206

Tsironis, Giorgos (Condensed Matter Division), Ph.D.
 1987, University of Rochester.

Research interests: Condensed matter; non linear physics. e-mail: gts@physics.uoc.gr, Tel: 0030 2810 394220

Ventura, Joseph (Astrophysics and Space Physics Division),
 Ph.D. 1974, City University of New York.

Research interests: High energy astrophysics; radiative processes and radiative transfer; accreting X-ray pulsars; magnetars.

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Zotos, Xenophon (Condensed Matter Division), Ph.D.
 1983, University of Virginia.

Research interests: Condensed matter.

Associate Professors

Anastasiadis, Spiros (Applied Physics Division), Ph.D.
 1988, Princeton University.

Research interests: Polymer surfaces – interfaces and thin films; dynamics and diffusion in multiconstituent polymer systems; organic / inorganic hybrid materials.

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- Charalambidis, Dimitris (Atomic and Molecular Physics Division), Ph.D. 1988, Albert-Ludwigs Universität Freiburg. Research interests: Atomic and molecular physics; atoms in strong electromagnetic fields; coherent phenomena; multiphoton processes; short wavelength generation; coherent XUV sources; generation and characterization of ultrashort pulses; atomic and molecular spectroscopy; laser surface interactions; laser based material characterization. e-mail: chara@iesl.forth.gr, Tel: 0030 2810 391464
- Flytzanis, Nikos (Condensed Matter Division), Ph.D.
 1972, University of Virginia.

Research interests: Condensed matter; non linear physics. e-mail: flytzani@physics.uoc.gr, Tel: 0030 2810 394224

Georgakilas, Alexandros (Applied Physics Division),
 Ph.D. 1990, University of Crete.

Research interests: Applied physics and materials science of advanced semiconductor materials and devices. e-mail: alexandr@physics.uoc.gr, Tel: 0030 2810 394104

- Haldoupis, Christos (Astrophysics and Space Physics Division), Ph.D. 1978, University of Saskatchewan.
 Research interests: Ionospheric and space physics.
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- Papamastorakis, Giannis (Astrophysics and Space Physics Division), Ph.D. 1975, Technische Universität München.
 Research interests: Space physics and astrophysics.
 e-mail: apamast@physics.uoc.gr, Tel: 0030 2810 394211
- Perakis, Ilias (Condensed Matter Division), Ph.D. 1992, University of Illinois, Urbana-Champaign.

Research interests: Condensed matter physics; light-matter interactions; many-body and collective effects on the nanoscale; ultrafast nonlinear optical and magneto-optical response of semiconductor and metal nanostructures; spin dynamics, spintronics and spin-photonics.

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Psaltakis, Grigoris (Condensed Matter Division), Ph.D.
 1981, University of Essex.

Research interests: Condensed matter; many body; superconductivity.

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- Tsamis, Nicholas (High Energy and Elementary Particle Physics Division), Ph.D. 1983, Harvard University. Research interests: Elementary particle physics; cosmology. e-mail: tsamis@physics.uoc.gr, Tel: 0030 2810 394205
- Tzanetakis, Panayotis (Condensed Matter Division),
 Ph.D. 1978, Université de Grenoble.

Research interests: Condensed matter; semiconductor physics and photovoltaic applications.

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Vardavas, Ilias (Astrophysics and Space Physics Division),
 Ph.D. 1977, University of Sydney.

Research interests: Planetary atmospheres; environmental physics; radiative transfer.

e-mail: vardavas@physics.uoc.gr, Tel: 0030 2810 394214

Zouros, Theo (Atomic and Molecular Physics Division),
 Ph.D. 1983, Yale University.

Research interests: Atomic physics; ion-atom collisions; electron-ion collisions; physics of highly charged ions; high resolution electron spectroscopy.

e-mail: tzouros@physics.uoc.gr, Tel: 0030 2810 394117

Assistant Professors

- Athanasiu, Gregory (High Energy and Elementary Particle Physics Division), Ph.D. 1988, Stanford University.
 Research interests: Neural networks; particle physics.
 e-mail: athanasi@physics.uoc.gr, Tel: 0030 2810 394207
- Ditsas, Petros (High Energy and Elementary Particle Physics Division), Ph.D. 1976, University of Manchester.

Research interests: Elementary particle physics. e-mail: ditsas@physics.uoc.gr, Tel: 0030 2810 394208

 Hatzidimitriou, Despina (Astrophysics and Space Physics Division), Ph.D. 1989, University of Edinburgh.

Research interests: Optical astronomy: galaxies, maggelanic clouds, globular clusters.

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Hatzopoulos, Zaharias (Applied Physics Division), Ph.D.
 1979, University of Wales.

Research interests: Applied physics. e-mail: chatzop@physics.uoc.gr, Tel: 0030 2810 394109

Karambourniotis, Dimitrios (Applied Physics Division),
 Ph.D. 1977, Université de Toulouse.

Research interests: Plasma physics; radiation transport and diagnostics; plasma-based light sources.

e-mail: dk@physics.uoc.gr, Tel: 0030 2810 394118

Kiriakidis, George (Applied Physics Division), Ph.D.
 1979, University of Salford.

Research interests: Materials, thin films, gas sensors. e-mail: kiriakid@iesl.forth.gr, Tel: 0030 2810 391271

Papadakis, Sifis (Astrophysics and Space Physics Division),
 Ph.D. 1992, University of London.

Research interests: High energy astrophysics; optical and X-ray astronomy; active galactic nuclei.

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Lecturers

Rakitzis, Peter (Atomic and Molecular Physics Division),
 Ph.D. 1997, Stanford University.

Research interests: Molecular physics.

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Specialized Teaaching Staff

• Georgiadou, Fotini, B.A. 1972 in English Studies, University of Athens.

Research interests: English for Physics.

Tel: 0030 2810 394012

 Kalpahidou, Symella, M.A. in Russian Language and Literature, University of Tashkent.

Research interests: Russian language and literature.

Tel: 0030 2810 281464

Papamastoraki, Ingrid, 1970 University of Munich.
 Research interests: German for specific purposes.
 e-mail: Ingrid@physics.uoc.gr, Tel: 0030 2810 263157

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

11.5 RESEARCH ACTIVITIES

The research activity of the Department's five scientific Divisions is described below.

II.5.I Division of Nuclear and Elementary Particle Physics

This Division is mainly oriented towards theoretical research in Elementary Particle High Energy Physics and Cosmology.

The issues addressed by the Division cover a wide range of topics, from phenomenological studies of supersymmetric extensions of the Standard Model (SM) to String Theory motivated studies aimed at deriving acceptable low-energy models and consistent formulations of quantum gravity from more fundamental unified theories, as well as

studies aimed at resolving some challenges of theoretical cosmology and some problems of condensed matter physics.

For more details, see: http://hep.physics.uoc.gr

11.5.2 Division of Atomic, Molecular and Optical Physics

In the Department of Physics of the University of Crete, there is a broad spectrum of activities related to atomic, molecular and optical physics. The largest part of these activities is in collaboration with the Laser and Applications Division of IESL-FORTH. The laser laboratories are equipped with state-of-the-art lasers and associated experimental workstations permitting the realization of novel experiments in cutting edge research topics. The on-going activities are based on a strong interplay between basic, applied and technological research. The activities include training, demonstrations and promotion of laser related technologies. Staff members of the laser Division participate in several competitive European research programmes, in some of which they play a leading international role, and have established a great number of effective international collaborations. Some of them are members of European and international scientific boards. The scientific impact of the Division, as quantified by means of publications and participation in international scientific events and patents, includes more than 30 publications in international refereed journals or books per year and about 10 invited talks per year at international conferences.

The main research activities of the Division are broken down into three components. The first, Basic Research, focuses on theoretical atomic and molecular physics; experimental atomic and molecular physics with lasers; and atomic physics with accelerators. Applied Research, the second, concentrates on materials growth, characterization and process analysis; novel coherent light sources; and

novel laser based methods for quantitative elemental analysis. The third, Technological Research, focuses on process diagnostics.

11.5.3 Division of Condensed Matter Physics

This Division focuses on fundamental and applied research topics of importance for present and future-day technologies. It strives to understand the physics behind emerging technologies, such as the new generation of photonic, spintronic, and nanoscale devices that will enable a wide variety of new applications. The goal of this group is two-fold:

- To describe, starting from the basic principles, how the complex fundamental physical processes lead to the interesting equilibrium or non-equilibrium properties of advanced materials, and
- To generate new ideas for designing novel materials with desirable and optimized properties.

The theoretical activities cover all major fields of modern condensed matter physics and quantum control of matter. The Condensed Matter Division uses state-of-the-art analytical and computational techniques of modern many body theory. Extensive computational work is performed by using standard computational techniques and by developing new computational procedures.

11.5.4 Division of Applied Physics

The main objective of this Division is to prepare students for academic and industrial careers at the forefront of science and technology. Teaching and research are focused on fundamental issues in condensed matter, plasma physics and materials science and on the practical application of these concepts and techniques to technology. Moreover, due to the interdisciplinary character of this branch of science, the students (undergraduate and postgraduate)

are exposed to collaborations with chemists, materials scientists, and chemical and electrical engineers. The balance between fundamental science and application makes the programme attractive for students aiming at careers in modern technology.

The Division puts emphasis on the education and training of undergraduate and postgraduate students since it is recognized that applied physics provides good prospects for employment as well as for research in many areas of modern technology. The Department of Physics awards a "Certificate in Microelectronics" relying essentially on courses offered by faculty of this Division. Besides, the faculty of the Division contributed significantly in organizing and operating the Postgraduate Course in Microelectronics-Optoelectronics leading to M.Sc. and Ph.D. degrees as well as in organizing and operating the new Department of Materials Science and Technology of the University of Crete.

The research activities of the faculty members of the Division are in the areas of microelectronic-optoelectronic and photonic materials and devices, plasma physics, and polymer science and engineering.

11.5.5 Division of Astrophysics and Space Physics

Research in Astrophysics and Space Physics - both theoretical and observational - covers a broad range of subjects, from studies of the Earth's atmosphere/ionosphere to the study of distant galaxies. Within our Solar System, research is concentrated on the evolution of planetary atmospheres. Within our Galaxy, young stellar objects, white dwarfs, neutron stars, black holes, planetary nebulae, supernova remnants, globular clusters, and RR-Lyrae variable stars are studied. Beyond our Galaxy, areas of investigation include the star formation history and evolution of galaxies in the Local Group, the dust distribution in spiral galaxies, astronomical MASERs, jets and other exotic phenomena in

active galactic nuclei and quasars.

The data used are obtained from a variety of optical telescopes (Skinakas, AAT, CTIO), radio telescopes (VLBI, AT), the Hubble Space Telescope, several earth-observation satellites (Meteosat, etc), astronomical satellites (ROSAT, CHANDRA, XMM) and radars.

The research activities of the Division are supported by the Skinakas Observatory, the Laboratory for Environmental Research (at FORTH), and the Laboratory for Ionospheric Physics. The scientific impact of the Division, as quantified by means of publications and participation in international scientific events, results in about 10-15 publications in refereed journals per year and about 10-15 invited talks at international meetings per year.

Skinakas Observatory



The favourable climatological conditions prevailing in Crete (large number of clear-sky nights per year) combined with the high mountains, place the island of Crete among the best locations in Europe for high quality astronomical observations. These facts were influential in the establishment of the Skinakas Observatory.

The Skinakas Observatory has been built and operates as part of a scientific research collaboration between the University of Crete, the Foundation for Research and Technology - Hellas (FORTH) and the Max-Planck-Institut fur Extraterrestrische Physik of Germany.

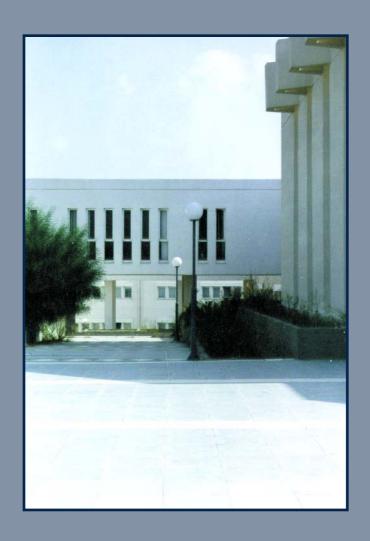
The site of the Observatory, chosen on scientific and functional grounds, is the Skinakas summit of Mount Ida (Psiloritis), at an altitude of 1760 m and 60 km from Heraklio. The Observatory has two telescopes: a Modified Ritchey Cretien telescope with a 1.3 m aperture and a 30 cm flat-field telescope.



1.3 m Telescope at Skinakas Observatory

11.6 CAREER OPPORTUNITIES FOR GRADUATES

- o By choosing a proper selection of courses, a physics student with an interest in the field of engineering may proceed to become, after postgraduate studies, a modern engineer, or an applied scientist in fields such as telecommunications, electronics, optoelectronics, computational science, materials science, mild energy sources, the environment, or medical technology.
- Furthermore a physics student, by making proper curriculum choices, may easily move in some modern directions of chemistry, chemical technology, or biology.
- Career opportunities also arise in seemingly unrelated fields such as scientific and technical journalism, the analysis of economic phenomena, addressing complicated computational problems of modern society, and so forth.
- For the talented physicist, the possibility always exists of pursuing postgraduate studies, and ultimately a research career at a University or research centre.



12. DEPARTMENT OF COMPUTER SCIENCE

Website: www.csd.uoc.gr, e-mail: csd@csd.uch.gr

Departmental Secretariat

Tel: 0030 2810 393500, 393503/4, Fax: 0030 2810 393501

Departmental Secretary: Nikos Mastorakis

12.1 BACKGROUND OF THE DEPARTMENT

The Department of Computer Science of the University of Crete began operating in 1984; it was the second Computer Science Department to operate in Greece. The Department is located at the University campus near Knossos in Heraklio. It has 651 undergraduate and 87 postgraduate students. The mission of the Department is to educate its students and to conduct high quality research in the rapidly developing area of computing.

Since 1985 a complete postgraduate studies programme has been in existence, including a full spectrum of postgraduate courses. From the Department's very beginning, close cooperation was cultivated with the Computer Science Institute (CSI) of the Foundation of Research and Technology Hellas (FORTH). Over the years the Department has pursued joint work with dozens of universities, research centres and companies. The Department's close relations with FORTH, which was incidentally the first Greek Internet node, have assured it an international reputation. Today, fifteen years after its inception, the Department's graduates hold top-notch business, industrial, educational, research and academic positions in Greece, Europe and many other parts of the world.

The goals of the curriculum of the Department of Computer Science are:





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- High level and quality, according to international standards.
- Conformity with contemporary views of computer science, technology, information and telecommunication.
- Application-oriented studies, with emphasis on laboratorydriven education, as well as the development in students of creative and inquisitive minds and an understanding of basic principles, in order to achieve the proper education of scientists and engineers.
- · Awareness of the specific needs of the Greek job market.
- The proper balance of depth and breadth.
- At the postgraduate level, specialization in areas of prime importance and conducting of research of international standards, in collaboration with FORTH.
- Nurturing student interest in scientific work.

Achieving the above objectives is a fundamental concern of the Department, one which is feasible as a result of the high standards maintained by the Department faculty and the students' active participation in the Department's various activities.

12.2 ABOUT COMPUTER SCIENCE

Computer Science is focused on the study of the way computers can be built and programmed, and their application in various fields. Computer Science has built the foundation on which the current transition of the developed countries towards an information economy and society is based.

It is not an exaggeration to say that the use of computers touches almost every aspect of human endeavour. For example:

- Currently the worlds of computing and telecommunications are converging, thus opening the way for enormous opportunities for further research and development.
- The use of computers allows for rapid developments in the area of molecular biology and genetics.

- The creation of the Internet has changed the way that companies and governments conduct their business, as well as the way that people seek information and communicate.
- Information technology allows for dramatic improvements in medical diagnosis, and the support of disabled persons.
- · Robotics is still changing the way manufacturing works.

By its nature, computer science is an interdisciplinary field which combines Science, to improve our understanding of computing and its applications; Engineering, to design and develop working systems, and to manage the complexity of large projects; and Communication skills, to capture user requirements.

12.3 UNDERGRADUATE STUDIES

The department offers a Bachelor's degree in Computer Science. The undergraduate Programme of Studies in Computer Science consists of core courses, which are compulsory, two groups of optional courses, of which the student must pass a prescribed number, and other courses to be taken at the student's discretion. The optional courses allow the student to specialize within a particular branch of Computer Science.

The courses are organized according to the following thematic units:

- o Programming
- o System Architecture
- o Theoretical Computer Science
- o Applied Computer Science

In addition, each student must complete a bachelor's dissertation. It is the cornerstone of the undergraduate studies programme, and emphasizes the strong project-oriented and applied nature of the Department. The purpose of the dissertation is to have the students of the Department apply the knowledge which they have gained

throughout their studies to solving some specific, practical and realistic problem like the ones they will face during their professional careers.

Finally, undergraduate students in the Department of Computer Science may spend one work-term, between 3 and 6 months, full-time or almost full-time, in a Greek or foreign company or organization, either public or private, for the purpose of acquiring work experience in areas related to computer science and its applications. The work is carried out under the supervision of a Department faculty member or visiting professor and a member of the cooperating organization. This work-study counts toward the student's graduation requirements as an optional course.

12.4 POSTGRADUATE STUDIES

The Department was the first in Greece to establish a postgraduate studies programme in Computer Science. It offers programmes leading to a Master's degree and to a Ph.D. degree. Most of the postgraduate students receive scholarships throughout their studies.

The objectives of the Postgraduate Studies Programme are:

- Specialization in some area(s) of computer science so that the holder of an M.Sc. degree has augmented professional qualifications in the area(s) of specialization.
- Training of scientists/researchers, so that the holder of a Ph.D. is able to contribute substantially to research, technology and higher education in the domain of Computer Science.

The postgraduate studies are organized in the following thematic units:

- Computer Architecture and Digital Systems
- Computer Networks and Digital Communication
- Parallel and Distributed Systems
- Information Systems and Software Technology
- Machine Vision and Robotics

- Algorithms and Systems Analysis
- Electronic Commerce
- Multimedia
- Medical Informatics and Bioinformatics

Postgraduate studies in the Department of Computer Science at the University of Crete are carried out in close cooperation with the Institute of Computer Science of FORTH. This cooperation helps students engage in activities at the forefront of research.

12.5 FACULTY MEMBERS

Professors

Antoniou, Grigoris, Ph.D. 1989, Universtitat Osnabruck.
 Research interests: Logical Programming; software systems; artificial intelligence.

e-mail: ga@csd.uoc.gr, Tel: 0030 2810 393523

• Constantopoulos, Panos, Ph.D. 1983, M.I.T. Research interests: Information systems; operations research; decision support systems. e-mail: panos@csd.uoc.gr, Tel: 0030 2810 393534

 Katevenis, Manolis, Ph.D. 1983, University of California at Berkeley.

Research interests: Computer architecture; VLSI systems; high-speed networks.

e-mail: kateveni@csd.uoc.gr, Tel: 0030 2810 393564

• Nikolaou, Christos, Ph.D. 1982, Harvard University. Research interests: Distributed systems; information economies; electronic commerce.

e-mail: nikolaou@csd.uoc.gr, Tel: 0030 2810 393576

• Orphanoudakis, Stelios, Ph.D. 1975, Dartmouth College. Research interests: Computer vision; robotics; parallel image processing; medical information systems; digital image analysis.

e-mail: orphanou@csd.uoc.gr, Tel: 0030 2810 393510

 Tollis, Ioannis, Ph.D. 1987, University of Illinois, Urbana-Champaign.

Research interests: Graph drawing; network visualization; graph layout; information visualization; computer aided design; VLSI layout; computational geometry; algorithms and applications; telecommunication networks; bioinformatics. e-mail: tollis@csd.uoc.gr, Tel: 0030 2810 393579

Traganitis, Apostolos, Ph.D. 1975, Princeton University.
 Research interests: Communication systems; digital and analog electronics.

e-mail: tragani@csd.uoc.gr, Tel: 0030 2810 393553

• Tziritas, George, Ph.D. 1981, Institut Nationale Polytechnique de Grenoble.

Research interests: Digital image processing; digital video processing; computer vision; pattern recognition; image and video communication; multimedia systems.

e-mail: tziritas@csd.uoc.gr, Tel: 0030 2810 393517

Associate Professors

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- Bilas, Angelos, Ph.D. 1998, University of Princeton. Research interests: Applications of architecture with commodity components; parallel architectures programming paradigms; parallel applications; interconnection networks; block-level storage subsystems; performance analysis and evaluation; distributed systems; distributed operating systems. e-mail: bilas@csd.uoc.gr, Tel: 0030 2810 393569
- Markatos, Evangelos, Ph.D. 1993, University of Rochester.
 Research interests: Operating systems; computer architecture; parallel and distributed systems; WWW.
 e-mail: markatos@csd.uoc.gr, Tel: 0030 2810 393555
- Plexousakis, Dimitris, Ph.D. 1996, University of Toronto. Research interests: Database systems; knowledge representation.

e-mail: dp@csd.uoc.gr, Tel: 0030 2810 393528

• Stefanidis, Constantine, Ph.D. 1987, University of Kent at Canterbury.

Research interests: Human-computer interaction. e-mail: cs@csd.uoc.gr, Tel: 0030 2810 393516

• Stylianou, Yannis, Ph.D. 1996, ENST-Telecom, Paris. Research interests: Digital signal processing; pattern recognition.

e-mail: yannis@csd.uoc.gr, Tel: 0030 2810 393559

 Trahanias, Panos, Ph.D. 1988, National Technical University of Athens.

Research interests: Computer vision; robotics; image processing; pattern recognition.

e-mail: trahania@csd.uoc.gr, Tel: 0030 2810 393515

 Tsakalides, Panagiotis, Ph.D. 1995, University of Southern California.

Research interests: Digital signal processing; statistical communication theory; non-Gaussian time series analysis; remote sensing and imaging.

e-mail: tsakalid@csd.uoc.gr, Tel: 0030 2810 393587

Assistant Professors

• Christophides, Vassilis, Ph.D. Conservatoire National des Arts et Metiers (CNAM), Paris.

Research interests: Object database management systems; electronic documents management systems; wide-area information integration systems.

e-mail: christop@csd.uoc.gr, Tel: 0030 2810 393538

 Georgakopoulos, Georgios, Ph.D. 1989, National Technical University of Athens.

Research interests: Theory of computation and algorithms. e-mail: ggeo@csd.uoc.gr, Tel: 0030 2810 393529

Siris, Vasilios, Ph.D. 1998, University of Crete.
 Research interests: Traffic measurement and analysis in

high-speed networks; technology and architecture of broadband networks; resource management and control in wired and wireless networks.

e-mail: vsiris@csd.uoc.gr

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

12.6 RESEARCH

All faculty members of the Department of Computer Science are engaged in high quality research. The quality of their work is evidenced by the number of their publications in leading international journals and conference proceedings; by their participation in major national and international research projects, with partners both from academia and industry; and by their leading role in standardization efforts and the organization and running of international events and bodies.

The research is conducted in close cooperation with the Computer Science Institute of FORTH, and the Technological Park. This cooperation ensures that the research is conducted with a view to its potential application; a manifestation of this attitude is start-up companies that

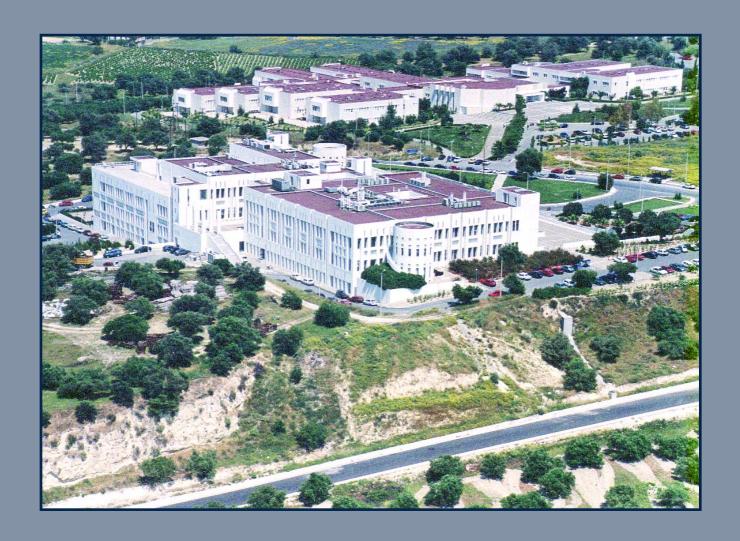
have emerged from research efforts. It also ensures that a critical mass of IT related R&D is concentrated in Heraklio.

Areas of research in which the Department is involved include:

- Computer architecture
- Networks
- Design of electronic circuits
- Multimedia
- Digital and wireless communications
- Computer and telecommunication security
- Electronic commerce
- Databases
- · Algorithms and computational complexity
- Knowledge-based technology and artificial intelligence
- Information systems
- Parallel and distributed computing
- Medical informatics
- · Robotics and computer vision
- Human-Computer interaction, virtual reality
- Cultural informatics
- Bioinformatics

It is noteworthy that the microelectronics chip ATLAS I, with 6 million transistors, was designed at FORTH by professors and students of the Department between 1996 and 1998.





13. DEPARTMENT OF BIOLOGY

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Departmental Secretariat

Tel: 0030 2810 394400/2, Fax: 0030 2810 394408

Departmental Secretary: Charitini Zafiropoulou

13.1 BACKGROUND OF THE DEPARTMENT

The Department of Biology, located at the University campus at Voutes just outside the city of Heraklio, was initiated in 1981 when the Governing Council of the University invited Professors F.C. Kafatos and V. Nafpaktitis to join the faculty, on joint appointments (with Harvard University and University of Southern California, respectively). The first two professors organized the new Department along modern lines, into two Divisions reflecting broad levels of biological organization rather than traditional disciplines. One Division included Biochemistry, Molecular Biology, Cellular and Developmental Biology, while the other Division included Biology of Organisms, Populations, Environment and Marine Biology. Another initiative, novel for Greece, was to add a Division devoted to applications of the Life Sciences (Biotechnology and Applied Biology).

In terms of subject matter, the original plan envisaged emphasis on selected areas of Biology in which a critical mass of internationally competitive faculty could be attracted, and which offered the possibility for the new Department to play a pioneering role in the Greek University system. Among these focal areas were Molecular Genetics, Cell and Developmental Biology, Marine Biology, Applied Biology and Biotechnology. This emphasis was reinforced by the



creation of two Research Institutes, independent of but in close collaboration with the Department of Biology. The Institute of Molecular Biology and Biotechnology (IMBB) and the Institute of Marine Biology of Crete (IMBC), both administrated by the Secretariat for Research and Technology of the Ministry for Development, were founded following initiatives by faculty members of this Department.

These institutes, IMBB and IMBC, offered important research opportunities for faculty members in the respective areas of interest, and made possible the foundation of an organized Postgraduate Programme. As the Department grew, it expanded its coverage in the areas of Biochemistry, Physiology, Ecology, Evolutionary Biology and Microbiology, thus permitting the development of breadth as well as depth in the curriculum and the research programme.

Reflecting its emphasis on scholarship, the Department began its educational activities in 1983 at the postgraduate level, including a full course curriculum, laboratory rotations and qualifying examinations. The first undergraduates were admitted in 1987. The above scheme enabled fast development of research laboratories and produced knowledge which was used in the subsequent laboratory training of undergraduate students. Today the Department has about 330 undergraduate students and more than 170 postgraduate students. The Museum of Natural History of Crete, which is under the Faculty of Sciences and Engineering of the University of Crete, is also the result of initiative by the Department of Biology.

13.2 DIVISIONS OF THE DEPARTMENT

I 3.2.1 Division of Biochemistry, Molecular Biology,Cellular and Developmental Biology

Research activities in this Division are focused on biochemistry and the molecular and cellular aspects of life.

The interests of the various groups include protein structure, gene regulation, development and genomics. A wide range of model systems is used, such as mammals, insects, plants and yeast. Most groups in the Division collaborate closely with the IMBB, at which 9 Faculty members hold a joint appointment. Furthermore, most groups maintain close collaborative ties with related research groups both within Greece and abroad.

13.2.2 Division of Biology of Organisms, Populations, Environmental and Marine Biology

The research activities in this Division include biochemistry, molecular physiology, biotechnology and taxonomy of plants, evolutionary biology, ecology, marine biology and neuroscience. More specifically, the following research groups are included:

- Marine Biology. The research subjects include studies of the genetic origin of Greek sea populations, trophic chains, fish physiology and marine environment.
- Plant Physiology, Biochemistry and Biotechnology. The research topics include molecular physiology of plant morphogenesis with emphasis on molecular cloning of enzymes of polyamine synthesis and oxidative stress; protoplast technology, molecular biology of enzymes of ammonia assimilation and anthocyanin synthesis. Also, photosynthesis, photobiology and production of virus free plant material.
- Population Genetics and Evolution. The research topics include assessment of genetic diversity in and among natural populations of fish and marine bivalves, molecular evolution of mitochondrial DNA, genetic improvement of aquacultured stocks and genetics of speciation in Drosophila.
- Biosystematics and Ecology. The research directions include plant systematics, computerized taxonomical methods of plants, and terrestrial ecology.

• Neuroscience. The current issues under investigation include plasticity mechanisms that underlie latter stages of brain development, such as the role of neurotransmitter receptors, cell birth and migration. In vitro and in vivo autoradiography, immunocytochemistry, and quantitative image analysis methods are applied.

13.2.3 Division of Biotechnology and Applied Biology

Research in this Division focuses on applied aspects of organismal and molecular biology, particularly on problems related to the Greek economy. The efforts of six research groups centre around four main topics.

- Aquaculture research and management. Mass rearing and cultivation technologies of valuable marine fish species and selected hybrids. Expert systems in automation and control. Biology of development, behaviour, nutrition, physiology and health of farmed fish. Biogestion and culture technologies of several phytoplankton and zooplankton strains.
- Plant protection: a) Compatible biocontrol of fruit flies as an alternative to the use of chemical insecticides. Mass rearing and release of genetically sexed (by genetic engineering or conventional methods) males following gamma sterilization. Exploitation of food and pheromone attractants. Species and sex specific insect attractants. Postharvest fruit treatment for insect control. b) Molecular mechanisms of microbial phytopathogenesis. Genetic engineering of pathogen-resistant plant varieties.
- Enzyme Biotechnology: a) Chitin Enzymology and Biotechnology. b) Enzymology and Biotechnology of psychrophilic microorganisms. c) Downstream processing of enzymes. d) Molecular mechanism of secretion of enzymes and toxins through biological membranes. e) Development of protein secretion biotechnology applied to the production of human cytokines and other high value added polypeptides.

 Microbiology: a) Protein secretion and membrane biogenesis. b) Secretion of specialized toxins from pathogenic bacteria. c) Biotechnological production of human polypeptides in microorganisms. d) Development of novel antibiotics.

13.3 UNDERGRADUATE STUDIES

The goals of the undergraduate Programme of Studies of the Department of Biology are:

- Conformity with the contemporary concepts of Biological Sciences.
- High level and quality, according to international standards, and proper combination of depth and breadth.
- Applied orientation with emphasis on experimental and laboratory education.

The undergraduate programme in Biology comprises the core courses, which are compulsory; a group of elective compulsory courses, out of which the students have to take a certain number; and other optional courses to be taken at the students' discretion. The optional courses allow specialization in a field of Biology. The workload of each course is counted in credits or ECTS units for international students. The semester workload of a student is the sum of the credits of the courses in which (s)he has enrolled during that semester. It is recommended that this load be approximately equal to 20 credits per semester.

As the vast majority of the literature in Biological Sciences is in English, technical fluency in this language is an absolute necessity for studying Biology. The students should take the corresponding compulsory ESP (Biology) English courses during the first two years of their studies, unless they already know English at a level which enables them to pass the corresponding examinations without attending the courses.

13.3.1 Requirements for Graduation

The requirements for graduation are as follows:

- Admission to the Department and enrolment in courses for at least eight semesters.
- Successful completion of all core courses (Table 1).
- Successful completion of at least five courses from Table 2, for students who wish to specialize in one of the following fields: Molecular Biology and Biotechnology, Organism and Marine Biology, or Plant Biology. The selected courses must conform to the selected field of specialization.
- Successful completion of optional courses (Table 3). The number of optional courses depends on the students' workload (credits). Alternatively, the students may elect to

fulfil 12 credits with laboratory work leading to the B.Sc. dissertation.

• Successful accumulation of at least 140 credits in total. Before being allowed to enrol in optional courses, students must have successfully completed the courses Introduction to Zoology, Plant Systematics, Organic Chemistry I, Biomathematics, Classical Genetics and at least two of the following courses: Biochemistry I, Microbiology, Cell Biology and Molecular Biology. Before being allowed to enrol in laboratory work leading to the B.Sc. dissertation, students must have completed all the core courses (semesters I-4) and also five of the optional courses in group A (Table 2).

Table I. Core Courses (compulsory)

Semester A	Semester B
Introduction to Zoology	Cell Biology
Seminar in Computers	Plant Systematics
Physics	Biomathematics
General Chemistry	Organic Chemistry II
Organic Chemistry I	English II
English I	Biology and Animal Systematics
Semester C	Semester D
Microbiology	Ecology
Plant Structure	Molecular Biology
Classical Genetics	Molecular Genetics
Biochemistry I	Biochemistry II
English III	English IV
Methods in Microbiology	Molecular & Cell Biology
& Biotechnology	Methods
	Methods in Genetics
	& Immunology

Table 2. Elective - Compulsory Courses (Group A)

Semester E	Semester F
Enzyme Biotechnology	Plant Physiology
Human Genetics	Animal Physiology
Evolution	Developmental Biology
Marine Biology	Biotechnology II
Immunobiology	Biogeography

Table 3. Optional Courses (Group B)

Winter Semester	Spring Semester
Introduction to Medical Entomology	Special Topics in Immunology
Molecular Physiology	Protein Engineering
Regulation of Gene Expression	Special Topics in Cellular Biology
Crystal Structure Determination of Biological Macromolecules	Topics in Enzyme Biotechnology
Molecular Oncogenesis	Molecular Plant Virology
Plant Molecular Biology	Fauna of Greece
Topics on Cellular Differentiation	Economic Entomology
Modern Microscopy	Fish Cultures
Photobiology	Ichthyology
Ecosystem Management	Marine Ecology
Statistics with Computers	Molecular Stress Physiology in Plants
Developmental Biology of Drosophila	Plant Biotechnology
Topics in Physical Geography & Geomorphology	Neurobiology
	Functional Morphology of Vertebrates
	Flora & Vegetation of Crete
	Island Ecology
	Photosynthesis
	Applied Biology
	Special Topics in Marine Biology
	Computers Application in Biology

An Undergraduate Studies Committee consisting of three faculty members and two student representatives is responsible for all problems pertinent to the Programme of Studies. Undergraduate students may also address any question related to their Programme of Studies and/or personal problems to the undergraduate student advisors.

13.3.2 Transfer of Credits Earned at Other Universities

Students admitted to the Department of Biology by whatever procedure (e.g. transfer with or without examinations, passing the entrance examination) and already enrolled in and having passed courses in other Departments of the University of Crete or other Greek or International Universities, may transfer course credits previously earned, and use them to satisfy the departmental degree requirements, under the following general principles:

- Courses must be explicitly described in the Programme as either compulsory or optional courses.
- Credits from a course taken at another University or another Department of the University of Crete can be transferred only if the syllabus of the course in question exactly matches the syllabus of a course in the Department of Biology programme. This matching is reviewed by the Undergraduate Studies Committee or/and the respective course instructor. The credits for the course transferred are those of the respective course in the Biology programme. If the student has passed the course in a Greek University, the grade is copied from his/her transcript to his/her records. If the student has passed the course in a foreign University, the ECTS is applied.

13.4 POSTGRADUATE STUDIES

Postgraduate studies have been one of the major activities of the Department since its inception. Yearly, the Department

accepts about 60 postgraduate students. Recently the postgraduate programme was reorganized and secured funding from the Ministry of Education. As a result, since 1998 the Department of Biology has been offering Master's and Doctoral degrees in the following three thematic areas: 1) Molecular Biology and Biomedicine; 2) Plant Molecular Biology and Biotechnology; and 3) Environmental Biology - Management of Terrestrial and Marine Resources. Since 2002 two more postgraduate studies programmes have been established in the areas of: 4) Protein Biotechnology, and 5) Bio-ethics.

Admission to the Postgraduate Programme requires successful completion of a Bachelor's degree. At the time of application, the students must be nearing completion of their Bachelor's degree and must document a good command of the English language. Applicants are selected according to their grade point average, reference letters and personal interview.

To obtain the Master's degree, the requirements are: residency of four semesters; successful completion of courses (totalling 200 hours); three laboratory rotations (about three months each); and completion of a research project. For the Doctoral degree the requirements are (in addition to the above): residency of at least six semesters; passing of oral qualifying examinations; completion of a research project and successful defence of thesis.

13.4.1 Molecular Biology and Biomedicine

The Postgraduate Programme in Molecular Biology and Biomedicine (MBB) was established and is run jointly by the Department of Biology and the Division of Basic Sciences of the Department of Medicine, University of Crete. IMBB (part of the Foundation for Research and Technology Hellas (FORTH)), a leading research Institute in molecular biology, participates actively in all the educational, training and

research activities of MBB. The scope of this programme is to provide high quality training to young scientists in molecular biology, with an emphasis on cutting-edge developments and up-to-date technologies, and to prepare them to pursue careers in both the academic sector and industrial research and biotechnology. The quality and the large number of research groups of the three collaborating institutions (Department of Biology, Department of Medicine and IMBB) offer excellent training and allow selection from diverse areas of modern molecular biology with the goal of better understanding molecular functions as well as the development of potential medical and technological applications.

13.4.2 Plant Molecular Biology and Biotechnology

Plant Molecular Biology and Biotechnology is a Postgraduate Programme leading to a Master's or a Doctor of Philosophy degree in Plant Molecular Biology and Biotechnology. Applicants must hold a B.S. from a Greek University or an accredited foreign University in a related field (e.g., Biology, Plant Sciences, Agriculture, Chemistry, Medicine, Pharmacology, Physics, Geology). An additional requirement is good command of the English language. All candidates are subject to an oral interview by faculty members of the postgraduate programme. The object of this interview is to assess the student's general competence in his/her field, personality, compatibility, and to determine any possible gaps in undergraduate studies which may require supplementary courses or instruction. Those candidates who cannot be present for an oral interview must submit, in addition to other papers, the results of Graduate Record Examinations in the Biological Sciences.

The scope of this Postgraduate Programme includes:

• Improvement of theoretical knowledge of postgraduate students with advanced compulsory postgraduate courses

in subjects of current interest in Plant Biology including Plant Genomes, Transgenic Plants, Regulation of Photosynthesis, Cytochemistry, Secondary Metabolism and Genetic Engineering, Molecular Biology of Abiotic Stress, Plant Developmental Biology, Molecular Phytopathology, Biotechnology of Industrial and Aromatic Plants, Molecular Analysis of Nitrogen Metabolism and Immuno-and Molecular Plant Diagnostics.

- Specialization of postgraduate students in the field of Applied Biotechnology focusing on the development of transgenic plants, training in plant cell, tissue and organ cultures, increase in production of secondary metabolites from plant cell cultures, development of molecular markers for genetic typing of plants, development of immunodiagnostics for plant pathogens, and so on.
- Training of postgraduate students in laboratory techniques and introduction to research following laboratory courses and three rotations in research laboratories of the Department of Biology for a three-month period each.

Additional activities stressed by the programme include: training in writing scientific papers; pursuance of the current literature using modern electronic search programmes; postgraduate student seminar organization, research activity and publication of results; participation in local and international scientific congresses; attendance at scientific seminars, advanced research workshops, advanced study institutes, and intensive courses; and familiarization with job opportunities.

The training offered by this postgraduate programme allows young scientists to become competitive in the field of Plant Biotechnology and provides related job opportunities.

13.4.3 Environmental Biology - Management of Terrestrial and Marine Resources

This Postgraduate Programme is a joint effort by the

Department of Biology, the Museum of Natural History of the University of Crete and the IMBC. Teaching support is also provided by other Departments of the University of Crete, the Departments of Biology of the Universities of Athens, Thessaloniki and Patras and the Department of Environmental Engineering of the Technical University of Crete. Furthermore scientists from the national and international scientific community give a series of seminars on the latest progress in subjects pertinent to the postgraduate programme. The scope of the postgraduate programme includes:

- Integrated knowledge of the biology and management of marine and terrestrial resources.
- Integrated knowledge of management of terrestrial and insular ecosystems.
- Theoretical and applied knowledge of Aquaculture science and technology.
- Training in laboratory techniques and introduction of students to research after participating in three rotations in research laboratories of the Department of Biology, the Museum of Natural History of the University of Crete and the IMBC.
- Advanced knowledge of technology of protection and management of coastal ecosystems and fisheries resources.

Additional related activities include: research activity and publication of results; attendance at scientific seminars, advanced research workshops, and intensive courses; training in writing scientific papers; and participation in local and international scientific meetings on topics related to management of terrestrial and marine resources.

13.4.4 Protein Biotechnology

This new programme aims at providing first-rate training in the field of Protein Biotechnology, at the Master's and Ph.D. level, to students who have graduated in Biology,

Chemistry and other relevant disciplines. It has an initial two-year cycle, (one year of intensive course work plus one year of research leading to an M.Sc. dissertation) and will be offered jointly by the Departments of Biology and Chemistry of the University of Crete as an interdisciplinary programme. The various courses/course modules will be delivered primarily by the participating members of the Biology and Chemistry faculties with the assistance of research scientists of the IMBB and several external instructors from Greek and foreign academic and industrial establishments. Courses scheduled for the Academic Year 2003-04 are: Gene structure and genome organisation; Cell structure and function; Protein structure and function; Modern techniques in protein and proteome analysis; Structural proteomics; Bioinformatics and applications in the analysis of proteomes; Protein production technologies; and Applications of proteins in biotechnology and health.

Important novelties of the programme include the organization of summer courses focusing on the latest developments in the rapidly advancing field of Proteomics and the establishment of close links with private companies. In addition, the programme aims at interacting closely with other international postgraduate programmes, encouraging the exchange of teachers and students and the joint preparation of Web-based teaching material.

13.4.5 Bioethics

The department of Biology collaborates with the Departments of Sociology, Psychology, Medicine, and Philosophy and Social Studies (Coordinating Department) in the framework of the joint Postgraduate Programme in Bioethics. This programme aims at investigating the ethical problems arising from, or being directly connected to, Life Sciences and their applications, as well as their influence on Society and Environment. The goal of the programme is to

provide specialized knowledge to scientists and researchers that will contribute towards strengthening bioethics in Greece. This will be achieved by providing educated staff to Universities, Research Centres, Public Administration and Health-related institutions.

13.5 FACULTY MEMBERS

Professors

- Bouriotis, Vassilios (Division of Biotechnology and Applied Biology), Ph.D. 1980, University of Liverpool.
 Research interests: Biotechnology; restriction enzymes; protein purification.
 e-mail: bouriotiw@biology.uoc.gr, Tel: 0030 2810 394375, 394052
- Economopoulos, Aristidis (Division of Biotechnology and Applied Biology), Ph.D. 1970, University of California at Berkeley.

Research interests: Applied entomology; nutrition, reproduction, attraction to olfactory and visual stimuli, behaviour and field biology, alternative to insecticides control methodologies of fruit flies of economic importance for the Mediterranean countries; the sterile insect methodology with emphasis on quality control, development of species and sex specific attractants, and post harvest controlled atmosphere heat treatments.

e-mail: economop@biology.uoc.gr, Tel: 0030 2810 394077, 394076

 Eleftheriou, Anastassios (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1977, University of Aberdeen.

Research interests: Marine environmental biology. e-mail: aeleftheriou@biology.uoc.gr, Tel: 0030 2810 394065, 394064

 Kafatos, Fotis (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1965, Harvard University.

Research interests: Molecular and developmental biology; mechanisms controlling gene expression; molecular evolution; molecular genetics of economically important insects.

Tel: 0030 2810 394083

 Kentouri, Maroudio (Division of Biotechnology and Applied Biology), Ph.D. 1980, University of Aix-Marseille II and 1985, University of Montpelier.

Research interests: Fish cultures; behaviour of fishes under controlled conditions.

e-mail: kentouri@biology.uoc.gr, Tel: 0030 2810 394063, 394062

 Kokkinidis, Michael (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1981, Max Planck Institut, Munich.

Research interests: Crystallography of macromolecules; protein structure; biocomputing; molecular graphics. e-mail: kokkinid@biology.uoc.gr, Tel: 0030 2810 394351, 394050

• Louis, Christos (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1977, University of Heidelberg.

Research interests: Molecular genetics of Drosophila, *Ceratitis capitata*, and *Anopheles gambiae*; hybrid dysgenesis. e-mail: louis@biology.uoc.gr, Tel: 0030 2810 394373, 391119

 Moschonas, Nikolaos (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1982, University of Athens.

Research interests: Mammalian molecular genetics with emphasis on human structural and functional genomics, i.e.: identification of genes associated with genetic diseases and determination of their biological role by a variety of approaches including the use of model organisms. e-mail: moschona@biology.uoc.gr, Tel: 0030 2810 394357, 394356

 Panopoulos, Nikolaos (Division of Biotechnology and Applied Biology), Ph.D. 1971, University of California at Berkeley.

Research interests: Plant pathology; plant genetic engineering. e-mail: panopoul@biology.uoc.gr, Tel: 0030 2810 394369, 394368

 Papamatheakis, Joseph (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1975, University of Athens.

Research interests: Gene expression and control in vertebrates and humans; molecular control of genetic and viral diseases.

e-mail: papamath@biology.uoc.gr, Tel: 0030 2810 394361, 391165

 Roubelaki-Angelaki, Kalliopi (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1977, University of California at Davis.

Research interests: Plant molecular physiology and biotechnology; plant tissue culture and protoplast technology; plant morphogenesis; molecular biology of ammonia assimilation; production of virus free plant material. e-mail: poproube@biology.uoc.gr. Tel: 0030 2810 394073.

e-mail: poproube@biology.uoc.gr, Tel: 0030 2810 394073, 394072

• Stratakis, Emmanuel (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1974, University of Ulm.

Research interests: Structure and function of lipoproteins and vitellogenins in arthropods; lectins: sources, activity and applications.

e-mail: stratakism@biology.uoc.gr, Tel: 0030 2810 394051, 394050

 Zouros, Eleftherios (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1968, Agricultural University of Athens and 1972, University of Chicago.

Research interests: Molecular evolution and mechanisms of transmission of mtDNA; the genetics of speciation in Drosophila.

e-mail: zouros@biology.uoc.gr, Tel: 0030 2810 394075, 394074

Associate Professors

 Alexandraki, Despina (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1982, Harvard University.

Research interests: Molecular genetics; structural and functional analysis of yeast genes.

e-mail: alexandr@biology.uoc.gr, Tel: 0030 2810 394363, 391161

 Athanassaki-Vassiliadi, Irene (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1988, University of Alberta.

Research interests: Immunology.

e-mail: athan@biology.uoc.gr, Tel: 0030 2810 394355, 394354

 Chalepakis, George (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1988, University of Marburg.

Research interests: Cell biology; brain developmental biology. e-mail: chalepak@biology.uoc.gr, Tel: 0030 281 394359, 394358

 Delidakis, Christos (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1988, Harvard University.

Research interests: Molecular genetics of development; cell fate specification mechanisms by intercellular signalling

Molecular Biology, Cellular and Developmental Biology), Ph.D. 1983, University of Athens. Research interests: Cellular and developmental biology;

light and electron microscopy in biomedical sciences. e-mail: galanopoulos@biology.uoc.gr, Tel: 0030 2810

394053, 394425

Gizeli, Elektra (Division of Biotechnology and Applied Biology), Ph.D. 1992, University of Cambridge, Institute of Biotechnology.

Research interests: Biotechnology; acoustic immunosensors; chemical sensors for detecting binding reactions.

 Tsagri, Efthimia (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D. 1987, University of Giessen.

Research interests: Plant molecular virology. e-mail: tsagris@biology.uoc.gr, Tel: 0030 2810 394367, 394366

and on networks of transcription factors in developmental decisions in Drosophila. e-mail: delidaki@biology.uoc.gr, Tel: 0030 2810 391112,

and transcriptional regulation; emphasis on Notch signalling

391142

Kotzabasis, Kyriakos (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1987, University of Marburg.

Research interests: Plant physiology and biochemistry, photobiology, photosynthesis.

e-mail: kotzab@biology.uoc.gr, Tel: 0030 2810 394059, 394068

• Mylonas, Moisis (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1983, University of Athens.

Research interests: Zoology; terrestrial ecology. e-mail: mylon@biology.uoc.gr, Tel: 0030 2810 394079, 394078

Assistant Professors

Dermon, Catherine (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1987, University of Patras.

Research interests: Developmental neuroscience; functional anatomy of the brain.

e-mail: dermon@biology.uoc.gr, Tel: 0030 2810 394067, 394066

Economou, Anastasios (Division of Biotechnology and Applied Biology), Ph.D. 1990, University of East Anglia, Norwich.

Research interests: Microbiology.

e-mail: aeconomo@biology.uoc.gr, Tel: 0030 2810 394371, 391166

Gallanopoulos, Vassilios (Division of Biochemistry,

Lecturers

 Lika, Konstadia (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1996, University of Tennessee.

Research interests: Theoretical biology and evolutionary ecology.

e-mail: lika@biology.uoc.gr, Tel: 0030 2810 394081

 Pirintzos, Stergios (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1993, Aristotle University of Thessaloniki.

Research interests: Plant ecology and systematics; conservation biology; lichenology; air pollution biomonitoring. e-mail: pirintsos@biology.uoc.gr, Tel: 0030 2810 394085, 394377

· Pavlidis, Michael (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D. 1990, University of Athens.

Research interests: Fish physiology; environmental and hormonal mechanisms regulating reproduction of fish species. e-mail: pavlidis@biology.uoc.gr, Tel: 0030 2810 394084, 394089

Specialized Technical Staff (Undergraduate Students Laboratories)

- Dramountani, Maria e-mail: dramount@biology.uoc.gr, Tel: 0030 2810 394074
- Gomboitsos, Athanasios
 e-mail: gos@biology.uoc.gr, Tel: 0030 2810 394415,
 394058
- Kouimtzoglou, Eleni, Ph.D. 1999
 Tel: 0030 2810 394460
- Koumoundouros, Georgios, Ph.D. 1998 e-mail: g.koumoundouros@biology.uoc.gr, Tel: 0030 2810 394062
- Liapaki, Katerina e-mail: liapaki@biology.uoc.gr, Tel: 0030 2810 394433
- Markaki, Maria
 e-mail: markaki@biology.uoc.gr, Tel: 0030 2810 394433, 394058
- Papadaki, Anastasia-Polykseni, Ph.D. 2000
 e-mail: papadaki@biology.uoc.gr, Tel: 0030 2810 394072

The Department also employs Adjunct Professors on a yearly contract basis.

13.6 HONORARY PROFESSORS

•	David HOGNESS (Stanford U., USA)	1986
•	Ilse SCHWIDETZKY (Mainz, Germany)	1988
•	Robert SOKAL (SUNY at Stonybrook, USA)	1990
•	Francois JACOB (Institut Pasteur, Paris, France)	1991
•	Richard LEWONTIN (Harvard U., USA)	1996
•	Michael ASHBURNER (Cambridge U., UK)	2002



14. DEPARTMENT OF CHEMISTRY

Website: www.chemistry.uoc.gr, e-mail: secrchem@chemistry.uoc.gr

Departmental Secretariat

Tel: 0030 2810 393620, 393600, Fax: 0030 2810 393601

Departmental Secretary: Evangelia Chatzidaki-Mavroudi

14.1 BACKGROUND OF THE DEPARTMENT

The Department of Chemistry, located at the University campus near Knossos in Heraklio, was established in 1985, emphasizing both research and teaching. Its rising success is primarily due to the high level of pioneering research work conducted by its faculty members and its remarkable ability to incorporate new and exciting findings into the teaching and laboratory curricula. The increasing collaboration of the Department with Industry and the Public Sector to implement knowledge gained through research, constitutes a potent driving force for seeking excellence in research and teaching.

For the purposes of teaching and research, all academic staff and laboratories of the Department of Chemistry are distributed within five divisions:

- o Division of Physical and Theoretical Chemistry
- o Division of Organic Chemistry
- o Division of Inorganic Chemistry
- o Division of Environmental and Analytical Chemistry
- o Division of Biochemistry

All of the Department's faculty members participate in postgraduate as well as undergraduate teaching and research. Currently, the Department has approximately 300 undergraduate Chemistry majors and 145 postgraduate students.



The majority of the research activities of the faculty members are conducted at facilities provided by the Department of Chemistry. However, multidisciplinary work, as well as specialized research work, is also carried out by faculty members at the Foundation for Research and Technology Hellas (FORTH) at a nearby location in Heraklio. These research activities are carried out using hardware and software which are continuously upgraded or replaced with new technologically advanced versions. Such continuous involvement with modern technological developments provides the Department with the necessary credentials to participate in European Union Educational programmes providing training and mobility of students and researchers. Programmes of high visibility in which the Department participates actively include the ERASMUS and more recently the SOCRATES programmes and enhance the competitive nature and advanced level of education offered at the University of Crete. Moreover, the Department of Chemistry was chosen to participate in the ECTS programme in the early days of the programme's pilot implementation and belongs to a group of Chemistry Departments of European Universities among which students can freely move for educational purposes and, through SOCRATES, receive automatic recognition of teaching course credits.

Complementary to the educational strength of the Department of Chemistry is the close collaboration developed with the research and production sectors of the country's Industry over the years. The complex interwoven nature of Academia and Industry necessitates the existence of collaborative efforts targeting new products and novel technologies, and improving the competitive participation in developing specialized knowledge and global markets. The Department of Chemistry seeks such endeavours with the industrial sector and supports the involvement of faculty members in collaborative research projects with shortand long-term positive consequences for science and society.

14.2 UNDERGRADUATE STUDIES

14.2. I Requirements for Graduation

In order to obtain the undergraduate degree, students must successfully complete all compulsory courses and laboratories (128 credits), as well as seven optional courses (28 credits), for a total of 156 credits.

The Department of Chemistry offers its students the possibility of undertaking a small research project in one of the Department's research laboratories as one of their optional courses. This project is offered only to students who have already attended courses in the sixth semester, and can consist of either a laboratory-based research project or a literature-based project, or both. It can be carried out in a laboratory outside the Department, providing Departmental approval has been granted and the supervising Professor is a member of the Department of Chemistry.

The Department also provides its students with the opportunity to obtain paid work-study experience at public or private organizations and enterprises, as one of their optional courses. Funding for the limited available positions is obtained from the European Framework Programme.

14.2.2 Undergraduate Programme of Studies

The general framework of courses taken by undergraduate students is indicated in the table below. In the first year of studies, students take five compulsory courses each semester. In the second year, students can select one optional course, while in the third and fourth years, students have three optional courses per year.

Ist Semester	Credits	2 nd Semester	Credits
General Chemistry I	4	General Chemistry II	4
General Chemistry Laboratory I	3	General Chemistry Laboratory II	3
Mathematics I	4	Mathematics II	4
Physics I	4	Physics II	4
English I	4	English II	4
Total Credits	19	Total Credits	19
3 rd Semester	Credits	4th Semester	Credits
Organic Chemistry I	4	Organic Chemistry II	4
Physical Chemistry I	4	Physical Chemistry II	4
Introduction to Computational		Biochemistry I	4
Methods in Chemistry	4		
Organic Chemistry Laboratories I	3	Organic Chemistry Laboratories II	3
English III	4	Optional course	4
Total Credits	19	Total Credits	19
5 th Semester	Credits	6th Semester	Credits
Physical Chemistry III	4	Organic Chemistry III	4
Inorganic Chemistry I	4	Inorganic Chemistry II	4
Biochemistry II	4	Analytical Chemistry I	4
Optional course	4	Physical Chemistry Laboratory	4
Optional course	4	Optional course	4
Total Credits	20	Total Credits	20
7th Semester	Credits	8th Semester	Credits
Physical Chemistry IV	4	Environmental Chemistry	4
Analytical Chemistry II	4	Inorganic Chemistry Laboratory II	4
Inorganic Chemistry Laboratories	l 4	Analytical Chemistry Laboratory II	4
Analytical Chemistry Laboratory I	4	Optional course	4
Optional course	4	Optional course	4
Total Credits	20	Total Credits	20

14.3 POSTGRADUATE STUDIES

The Postgraduate Studies Programme enrols postgraduates from all Departments of the Faculties of Sciences of Greek universities or Polytechnic Institutes or corresponding Departments abroad. Qualified applicants from a wide spectrum of scientific disciplines and cultures are encouraged to apply. Chemistry as well as non-chemistry majors, professionals in the public and private sectors, and individuals holding the required credentials and the commitment to pursue an advanced degree in Chemistry are encouraged to apply.

14.3.1 Advanced Degrees offered by the Department of Chemistry

The Postgraduate Studies Programme of the Department of Chemistry offers two advanced degrees: the Master of Science (M.Sc.), and the Doctor of Philosophy (Ph.D.). Both degrees are offered for independent research in the following five general areas of chemistry: 1) Organic Chemistry, 2) Inorganic Chemistry, 3) Physical Chemistry,

4) Environmental and Analytical Chemistry, and 5) Biochemistry.

Postgraduate degrees are also offered in the following three specialized areas:

- Applied Molecular Spectroscopy (M.Sc., Ph.D.) (see http://www.cc.forth.gr/~TCCC/AMS_EPEAEK/index.html)
- o Natural Products (M.Sc., Ph.D.)
- Environmental Science and Technology (M.Sc.) (see http://ecpl.chemistry.uch.gr/ese/).

Further details concerning these specialized programmes can be obtained on-line or by writing to the Department of Chemistry.

The degrees are awarded to postgraduate students who have successfully completed their course requirements

and have passed the formal examinations on their dissertation or thesis written on research conducted in a faculty member's laboratory. It is expected that during their tenure the postgraduate students will develop their own approaches to solving complex research problems, original testable ideas and critical abilities, all virtues ascribable to mature and professional scientists.

a. The Degree of Master of Science (M.Sc.)

Postgraduate students must successfully complete a six-course, postgraduate level curriculum in Chemistry. Those students whose undergraduate major was not Chemistry (e.g. Biology, Physics, Engineering) are required to attend at least four undergraduate courses whose subject areas are different from that of their area of specialization.

An additional requirement is a research dissertation pertaining to research performed in the Departmental laboratories. The time required to prepare the research dissertation is at least six months. The research dissertation in written form is presented for critical evaluation before a formal committee comprised of departmental as well as interdepartmental faculty members.

The duration of the programme leading to a Master of Science degree is set by the Department at four academic semesters, but the actual time varies from two to three years depending on the research responsibilities undertaken by the candidate.

An M.Sc. is not a prerequisite for a Ph.D. degree, therefore prospective postgraduate students wishing to pursue a Ph.D. degree are encouraged to enrol directly in that programme.

b. The Degree of Doctor of Philosophy (Ph.D.)

The Postgraduate Studies Programme leading to the Ph.D. degree requires an additional four to six academic semesters.

Overall, the duration of the programme extends up to five years.

The following requirements are set for the Doctor of Philosophy (Ph.D.) degree:

- Attendance at and successful completion of six postgraduate level courses, three of which should originate from the field of specialization. The postgraduate student is expected to maintain a grade point average of 7.0 (out of 10.0) throughout his/her studies in order to remain in and graduate from the Programme.
- Successful performance on the General Graduate Record Exams (G.R.E.)
- Successful completion of an original piece of research work
- Writing and defence of a Doctoral Thesis

As part of the requirements for the Ph.D. degree, each candidate is required to pass an examination which includes an in-depth oral examination of the student's research activities and a written proposal presentation and defence. A final oral presentation of the thesis written on the research carried out is scheduled at the end of the student's studies following submission of the thesis to the Postgraduate Thesis Committee members.

All postgraduate students enrol as full-time students. Their main occupation includes uninterrupted attendance at postgraduate level courses and devotion to research. In addition, they are required to assist faculty members in the execution of the undergraduate educational curriculum of the department. The progress of postgraduate students is monitored closely by their respective Postgraduate Thesis Committee for the duration of their studies.

14.3.2 Requirements for Admission to Postgraduate School

Prospective students interested in pursuing postgraduate studies at the Department of Chemistry are normally

required to meet the following criteria:

- They should hold a B.Sc. degree from a Department of Chemistry from an Academic Institution in Greece or an equivalent Institution abroad. Non-chemistry majors are also encouraged to submit an application should they be interested in enrolling in the Postgraduate Studies Programme of the Department.
- 2) Applicants should submit:
 - a. A formal application to the Department of Chemistry expressing their interest in pursuing postgraduate studies in Chemistry.
 - A valid copy of the B.Sc. degree or detailed academic transcripts of courses and grades achieved over the course of undergraduate studies at their respective Institutions.
 - c. A brief Curriculum Vitae.
 - d. A copy of their undergraduate Research Dissertation or research work published in peer review journals (if available).
 - e. Two letters of recommendation.
- 3) Candidates who meet the above requirements undergo a cumulative written examination on Chemistry, with subjects including: a) Inorganic Chemistry; b) Organic Chemistry; c) Physical Chemistry; d) Analytical Chemistry; and e) Biochemistry.
- 4) For prospective postgraduate students whose native language is not Greek, the required qualifications, in addition to the above, include:
 - a. Submission of scores from the Verbal and Quantitative sections of the Graduate Record Examination (G.R.E.), as well as scores from Advanced Examinations on the subject of Chemistry.
 - An oral interview before a Committee of faculty members of the Department, during which they are required to supply information relevant to their

area of research interest, substantive documentation of up-to-date achievements, justification of their goal to pursue postgraduate studies and evidence of their commitment to go through with their advanced studies.

Important Note: Students wishing to enrol in the Fall Semester should submit their application no later than September 20. Applications received after that date will be given due consideration if vacancies still exist. Announcements of final admissions are made by the end of September.

14.3.3 Financial Support

Students entering the Postgraduate Studies Programme in Chemistry receive Departmental Teaching Assistantships depending on the annual budget of the Department. Postgraduate students are encouraged to apply for Fellowships awarded nationally on a competitive basis, such as those from the National Institute of Fellowships and other public and private institutions and associations. Fellowships are also offered to postgraduate students participating in research projects financed by competitive grants originating from the University of Crete (Special Research Fund), the Ministry of Education, the General Secretariat for Research and Technology, the Ministry of Development and others.

14.3.4 Continuing Education

Due to the rapid expansion of knowledge and technology in all areas of Chemistry, it is crucial that postgraduate students be exposed to the advances made in the past, the ones unfolding presently and those anticipated in the future. To meet this challenge the Department organizes a number of activities to improve and broaden the knowledge received by the postgraduate students, including:

- Departmental seminars on all areas of Chemistry, giving students the opportunity to enhance their level of understanding of currently accepted knowledge. They also provide different perspectives, views and methods of confronting problems either within the students' own areas of research or outside their areas of specialization. These seminars are held by Departmental faculty members, speakers from fellow Chemistry Institutions in Greece, or invited speakers from Industry, the Private or Public Sector.
- Research group seminars, informal as well as formal, aimed at enhancing the individual students' presentation skills, their ability to listen carefully, interact concisely with large audiences, and appropriately handle criticism of their research results, their scientific views and the approaches adopted.
- The annual three-day Chemistry Departmental Meeting at a location outside of Heraklio, during which postgraduate students and postdoctoral associates present their research results and scientific ideas before an audience of fellow postgraduate students and faculty members. Special guest speakers outside the field of Chemistry are also invited to give lectures in an effort to present exciting new areas of contemporary research, provide new perspectives in facing scientific and ethical questions, and encourage creative thinking that might bring related scientific fields closer together in the interests of solving complex scientific problems more efficiently. The meeting has become a tradition for the Department, serving to bring students and faculty members together outside the University setting and allowing them to hear and creatively discuss each other's research results and concerns.
- Interdepartmental seminars and colloquia. Seminars in Physics, Biology, Mathematics and Medicine are held, with the goal of attracting students and faculty members interested in specific subjects closely relating to their own research needs.

 Special colloquia for distinguished scientific guests. The Chemistry Department Seminar programme often extends invitations to speakers of renown in Greece or abroad to present their seminal work, as part of the Department's systematic efforts to honour scientists from Academia and Industry for their contributions to Chemistry and, more generally, to Science.

14.4 FACULTY MEMBERS

Professors

 Chaniotakis, Nikolas A. (Division of Environmental and Analytical Chemistry), Ph.D. 1990, University of Michigan.
 Research interests: Electroanalytical chemistry, and specifically the design, development and application of direct and selective chemical sensors and biosensors in environmental, clinical and food samples.

e-mail: nchan@chemistry.uoc.gr, Tel: 0030 2810 393618

 Coutsolelos, Athanassios G. (Division of Inorganic Chemistry), Ph.D. (Thèse d' Etat) 1985, University of Dijon.

Research interests: Metalloporphyrins as very close proximity pi-systems; modeling of active centres of biological processes; metal-metal bonding and one dimensional materials with porphyrinic units; metalloporphyrins in biocompatible catalytic conversion of polyene-polymers; new metalloporphyrinic complexes.

e-mail: coutsole@edu.uoc.gr, Tel: 0030 2810 393636

 Dais, Photis (Division of Physical and Theoretical Chemistry), Ph.D. 1980, University of Toronto.

Research interests: Study of the rotational dynamics of small- and medium-sized molecules in solution; structure determination of natural products by using multi-dimensional NMR Spectroscopy.

e-mail: dais@chemistry.uoc.gr, Tel: 0030 2810 393637

• Farantos, Stavros C. (Division of Physical and Theoretical Chemistry), Ph.D. 1978, University of Sussex.

Research interests: Theoretical and computational studies in chemical dynamics; dynamics and spectroscopy of vibrationally highly excited small polyatomic molecules; classical and quantum studies on the transition from regular to chaotic dynamics and their applications to chemical dynamics; construction of analytical molecular potential energy surfaces from ab initio calculations and empirical data; studies of the structure, dynamics, and thermodynamical properties of atomic and molecular microclusters.

e-mail: farantos@iesl.forth.gr, Tel: 0030 2810 391813

• Fytas, George (Division of Physical and Theoretical Chemistry), Ph.D. 1975, Technical University of Hannover. Research interests: Dynamic structure of molecular liquids; local and global motions in amorphous solid polymers and polymer/plasticizer systems; static and dynamic properties of polymer blends, copolymers, rigid rod polymers and soft colloids; self assembly and phase transitions in multiconstituent polymer systems; polymer dynamics in restricted geometries and on surfaces; new applications of the dynamic laser light scattering techniques.

e-mail: fytas@iesl.forth.gr, Tel: 0030 2810 391468, 391300-2

Ghanotakis, Demetrios F. (Division of Biochemistry),
 Ph.D. 1983, Michigan State University.

Research interests: Protein chemistry; structural and functional properties of enzymes.

e-mail: ghanotakis@chemistry.uoc.gr, Tel: 0030 2810 393634

• Katerinopoulos, Haralambos E. (Division of Organic Chemistry), Ph.D. 1984, New York University. Research interests: Synthesis and Structure - Activity Relationship (SAR) studies of rigid dopamine analogs; asymmetric synthesis; synthesis of fluorescent ion indicators; isolation and structure determination of components from aromatic and pharmaceutical plants from the flora of Crete. e-mail: kater@chemistry.uoc.gr, Tel: 0030 2810 393626

• Orfanopoulos, Michael (Division of Organic Chemistry), Ph.D. 1979, Case Western Reserve University. Research interests: Photooxygenations involving singlet oxygen and polyoxometalic complexes; photochemistry and synthesis of Fullerenes and Fullerene derivatives; mechanistic studies of reactive enophiles including triazolinedione (PTAD), tetracyano ethylene (TCNE) dimethyloxo-malonate, and dimethyldioxerane; natural product chemistry.

e-mail: orfanop@chemistry.uoc.gr, Tel: 0030 2810 393630

- Papagiannakopoulos, Panos (Division of Physical and Theoretical Chemistry), Ph.D. 1997, Boston College. Research interests: Basic and applied research in the area of experimental physical chemistry with modern spectroscopic techniques; kinetic studies of fast bimolecular reactions in the gas phase and laser photochemistry of polyatomic molecules, with applications in atmospheric chemistry and the environment, as well as kinetic studies of several chemical processes with industrial interest. e-mail: panosp@chemistry.uoc.gr, Tel: 0030 2810 393631
- Stephanou, Euripides G. (Division of Environmental and Analytical Chemistry), Ph.D. 1979, University of Zurich. Research interests: Chemistry of organic aerosols; atmospheric input of biogenic and anthropogenic organic compounds into the marine environment; fate of petroleum derived hydrocarbons, PCBs and surfactants in the marine environment; fate of organic compounds in drinking water during disinfection, and waste water during treatment. e-mail: stephanou@chemistry.uoc.gr, Tel: 0030 2810 393628

Associate Professors

• Kanakidou, Maria (Division of Environmental and Analytical Chemistry), Ph.D. 1988, University of Paris VII. Research interests: Atmospheric chemistry and physics with focus on atmospheric chemistry and climate changes due to human activities and on gas/particle interactions: modeling of homogeneous and heterogeneous tropospheric chemistry and aerosol formation; study of the changes in the oxidizing power of the atmosphere and the aerosol composition due to human activities and their interactions with climate.

e-mail: mariak@chemistry.uoc.gr, Tel: 0030 2810 393633

• Kitsopoulos, Theofanis N. (Division of Physical and Theoretical Chemistry), Ph.D. 1991, University of California at Berkeley.

Research interests: Experimental studies in chemical dynamics, and specifically the determination of the state-to-state differential cross section for a chemical process, be it a full or half collision, using velocity mapping or ion imaging; effects of excited electronic states on chemical reactivity; determining branching ratios for various electronic states of hot atoms produced by photofragmentation.

e-mail: theo@iesl.forth.gr, Tel: 0030 2810 391467

- Mihalopoulos, Nikolaos (Division of Environmental and Analytical Chemistry), Ph.D. 1989, University of Paris VII. Research interests: Atmospheric chemistry; factors controlling the oxidation capacity of the atmosphere; global biogeochemical cycles of S, N and C; chemical kinetics of sulphur compounds; environmental analytical chemistry. e-mail: mihalo@chemistry.uoc.gr, Tel: 0030 2810 393662
- Rizos, Apostolos K. (Division of Physical and Theoretical Chemistry), Ph.D. 1985, State University of New York.
 Research interests: The physical chemistry and physics of polymeric systems in order to characterize morphology,

conformation and dynamics both to polymers and copolymers in the melt state and in solution, and particularly the dynamics of bulk polymers, polymer blends, controlled release polymers and multicomponent systems utilizing a variety of experimental techniques.

e-mail: rizos@chemistry.uoc.gr, rizos@iesl.forth.gr, Tel: 0030 2810 393648

Salifoglou, Thanos (Division of Inorganic Chemistry),
 Ph.D. 1987, University of Michigan.

Research interests: Biotoxic metal ions in the pathogenesis of neurological disorders; natural antioxidants and metal ions in human nutrition; carcinogenic metals in the transcriptional regulation of signal transducing genes via minisatellite DNA in the human genome; insulin mimetic activity and chemistry of non-toxic water soluble vanadium (IV,V)—carboxylate compounds; design, synthesis, spectroscopic and structural characterization of inorganic clusters as minimal representations of active sites in metalloenzymes.

e-mail: salif@chemistry.uoc.gr, salif@edu.uoc.gr, Tel: 0030 2810 393652

Varotsis, Constantinos A. (Division of Biochemistry),
 Ph.D. 1990, Michigan State University.

Research interests: Biophysics of redox metalloenzyme catalysis, time-resolved resonance Raman and FTIR studies of rapid biological electron transfer reactions, spectroscopy of glycopeptide-derived antibiotics that have been used clinically against cell carcinomas; antimalarial drugs.

e-mail: varotsis@chemistry.uoc.gr, Tel: 0030 2810 393653

Assistant Professors

Demadis, Konstantinos (Division of Inorganic Chemistry),
 Ph.D. 1995, University of Michigan, Ann Arbor.

Research interests: Crystal growth and its inhibition related

to industrial water systems. e-mail: demadis@chemistry.uoc.gr, Tel: 0030 2810 393651

• Froudakis, George (Division of Physical and Theoretical Chemistry), Ph.D. 1995, University of Patras.

Research interests: Ab-initio investigation of structural and electronic properties of organic and inorganic molecules; large scale calculations of polymeric and biologically important systems using ab-initio and semiempirical methods; chemical reactions; electronic spectra of small molecules; carbon nanotubes; catalytic procedure and hydrogen adsorption; amorphous materials, surfaces and interfaces combining computational physic and quantum chemistry methods. e-mail: frudakis@chemistry.uoc.gr, Tel: 0030 2810 393655

 Pergantis, Spiros A. (Division of Environmental and Analytical Chemistry), Ph.D. 1994, University of British Columbia, Vancouver.

Research interests: Metal and metalloid speciation; tandem mass spectrometry; atomic spectrometry; separation science; determination of arsenic, tin, chromium, selenium and antimony species in environmental and biological samples, elucidation of biogeochemical pathways for their formation. e-mail: spergantis@chemistry.uoc.gr, Tel: 0030 2810 393684

- Smonou, Ioulia (Division of Organic Chemistry), Ph.D. 1985, National Research Institute and University of Athens. Research interests: Biotransformations in organic chemistry: mechanisms, stereochemistry, synthetic applications of enzymes, stereoselectivity and synthetic applications of alcohol dehydrogenases (ADHs), hydrolytic enzymes, chloroperoxidases and nitrilases, and mechanisms of organic reactions; dimethyl dioxirane (DMD) oxidations: mechanistic studies, organosilane chemistry.
- e-mail: smonou@chemistry.uoc.gr, Tel: 0030 2810 393610
- Stratakis, Manolis (Division of Organic Chemistry),
 Ph.D. 1991, University of Crete.

Research interests: Intrazeolite thermal and photochemical transformations: biomimetic spontaneous electron transfer transformation of terpenes within zeolite Na-Y supported with catalytic amounts of methyl viologen (paraquat), development of new stereoselective and diastereoselective hydroperoxidation reactions of alkenes within thionin-supported Na-Y, mechanistic studies and synthetic transformations of enophilic addition to alkenes.

e-mail: stratakis@chemistry.uoc.gr Tel: 0030 2810 393687

- Tsiotis, Georgios (Division of Biochemistry), Ph.D.
 1991, Max-Planck-Institut, Frankfurt.
 e-mail: tsiotis@chemistry.uoc.gr, Tel: 0030 2810 393606
- Vassilikogiannakis, Georgios (Division of Organic Chemistry), Ph.D. 1998, University of Crete.

Research Interests: Total synthesis of bioactive natural products which exhibit unique architectures, development and application of new and enabling methodologies for synthesis (e.g. stereoselective olefin metathesis, asymmetric cycloadditions), application of the new chemical knowledge derived from the previous two fields to chemical biology. e-mail: vasil@chemistry.uoc.gr, Tel: 0030 2810 393674

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

14.5 RESEARCH FACILITIES

Most of the Department's research and teaching activities are conducted at its facilities within the main Building at the campus near Knossos. The headquarters of the Department, the secretarial staff, the technical staff and the computer support facilities are also located within the main Building. Additional research activities are carried out in collaboration

with other multidisciplinary laboratories across the campus and at FORTH.

The Department maintains a considerable amount of equipment at strategically designated locations inside the main building as well as in nearby buildings. This equipment provides the main source of data gathering and manipulation of the research activities of its faculty members. Some of the instruments available include NMR, EPR, UV/Visible, FTIR, Gas Chromatography-Mass Spectrometer and others. The use of these instruments depends mainly on the need generated by developing research projects of the various divisions of the Department.

The Spectrometry Lab includes a Perkin-Elmer UV/ Visible spectrophotometer, a Perkin-Elmer FTIR spectrometer, and a Spectromics Fluorimeter. The NMR facility includes the newly acquired 500 MHz Bruker and the 300 MHz Bruker solid state NMR spectrometers. A Departmental Committee oversees the operation of this sensitive facility for maximum efficiency. Among the analytical instrumentation used extensively by a significant number of researchers are the GC-Mass and LC-Mass Spectrometers. Also worthy of note is the EPR facility with a Bruker EPR spectrometer able to handle synthetic as well as biological samples at variable temperatures. UV/Visible (Fibre Optic, Fluorescence), HPLC and FPLC instrumentation, Gas Chromatographs, Electrochemistry apparatus (e.g., Polarograph, Cyclic voltammetry) and FTIR spectrometers operate in faculty members' labs in specific modes capable of complex stopped-flow kinetics, high resolution separation and purification of synthetic and biological species as well as time resolved infrared measurements. Laser facilities exist at the FORTH location in Stavrakia and are used for chemical reaction dynamics and high resolution polymer material dynamics. Computational facilities including stateof-the-art software such as GAUSSIAN94,98, MOLPRO

and NWCHEM exist to support classical and quantum mechanical molecular dynamics and ab initio calculations. The Department also has access to other research facilities belonging to various Departments.

The instruments belonging to the aforementioned facilities are operated routinely by students and faculty members following thorough training. Specialized experiments requiring the above equipment call for the involvement of specialized research personnel capable of handling sensitive samples. Such personnel is found among senior postgraduate students or staff knowledgeable on the subject. The equipment is available to all members of the Department of Chemistry, making research possible in broad areas of chemistry.

14.6 ADDITIONAL FACILITIES

The Chemistry library, a facility of paramount importance for research in Chemistry, is housed within the central library of the Faculty of Sciences and Engineering. Journals, periodicals, textbooks, monographs, book series, chemistry encyclopaedias, Chemical Abstracts, reference books and scientific manuals covering wide areas of chemistry constitute the backbone of knowledge on which presently conducted research is based. Through European Union and government funded programmes, the Chemistry library is continuously enriched with contemporary material reflecting current

knowledge in chemistry which is useful to both undergraduate course curricula and postgraduate subjects.

The Department of Chemistry has also organized a Glass Blowing Facility, fully equipped with contemporary machinery and operated by skilful, dedicated professionals. It is one of the top glass blowing facilities in the country, operating highly efficiently. The majority of the research and educational glass equipment and apparatus in the Department are crafted in top working condition at this facility.

A Machine Shop has also been established by the Faculty of Sciences and Engineering and expedites virtually all small manufacturing jobs and repair needs for the uninterrupted operation and research activities of the Department. Handymen and skilful machinists provide invaluable services tailored to everyday teaching and research needs.

The advent of technology and the ongoing upgrade and acquisition of new instrumentation needed for contemporary research at the Department require top-of-the-line support and service in electronics, which is offered by the Departmental Electronics Shop. The Departmental electronics specialist skilfully builds equipment or services existing equipment destined for research and teaching. In addition, he masterfully caters to the electronic support needs for delicate instrumentation, including high resolution of the NMR spectrometers and spectroscopy lab apparatus.



15. DEPARTMENT OF APPLIED MATHEMATICS

Website: www.tem.uoc.gr, e-mail: tem@tem.uoc.gr

Departmental Secretariat

Tel: 0030 2810 393700, 393703, Fax: 0030 2810 393701

Departmental Secretary: Elli Drimiskianaki

15.1 BACKGROUND OF THE DEPARTMENT

Founded in 1999, the Department of Applied Mathematics received its first students in September of the same year. It currently has 473 undergraduate students. One of the newest Departments of the University of Crete, it is located at the University campus on Knossos Avenue in Heraklio. It was established in order to provide high quality education and to develop the research infrastructure for the applications of Mathematics in problems arising in Technology, Sciences and Economics.

The Department of Applied Mathematics aims to contribute to the training of an important and central scientific discipline and to the creation of the scientific infrastructure that is necessary for the technological and economic development of Greece. It will contribute to the training of scientists who combine good mathematical education with the ability to use computing systems, develop software and specialize in the solution of applied mathematics problems arising in technology and diverse scientific fields such as physics, economics and medicine.

Currently the Department of Applied Mathematics is organized following international standards. For that reason, the University of Crete has appointed an advisory committee consisting of internationally renowned scientists.



15.2 OBJECTIVES

The Department of Applied Mathematics aims to train scientists who will not only contribute to the development of science, but also cover the working needs in high level positions and will possess:

- The ability for in-depth analysis of problems related to their specialization.
- The ability to cross boundaries across disciplines and be knowledgeable about common mathematical models in different applications.
- Knowledge of techniques of classical and modern mathematical analysis.
- Expertise in the use of computing systems and the development of software.

15.3 UNDERGRADUATE STUDIES

The Undergraduate programme consists of four groups of courses: the **Compulsory** courses, the **Core** courses, the **Specialization** courses and the **Related-fields** courses. The student is expected to complete the Compulsory courses in the first two years of her/his studies. The Core courses are either compulsory or optional courses from the student's field of specialization. The Specialization courses are advanced courses from the student's field of interest. Students are also expected to complete a number of courses from the Related-fields group, depending on their specialization.

15.3.1 Areas of Specialization

The graduates of the department of Applied Mathematics will receive a common degree in Applied Mathematics, with the possibility of specialization in:

 Mathematics of Technological Sciences (e.g. Materials, Pollution, Informatics)

- Mathematics of Physical Sciences (e.g. Biology, Medicine, Geosciences)
- Mathematics in Economics and Business (e.g., Finance, Actuarial Mathematics, Operations Research)

15.3.2 Requirements for the Degree

In order to obtain the Bachelor's degree, students must fulfil the following requirements:

- Enrolment in the Department for at least eight semesters
- Completion of a total of 160 credits earned in courses, of which at least 100 should be from the Department of Applied Mathematics, 25 from courses in the student's area of specialization, 20 credits from the Faculty of Sciences and Engineering, and 15 credits from any other Faculty of the University of Crete
- Fulfilment of the requirements of the area of specialization

15.4 FACULTY MEMBERS

Professors

Tzavaras, Athanasios, Ph.D. 1985, Brown University.
 Research interests: Applied analysis; continuum physics; kinetic theory.

e-mail: tzavaras@tem.uoc.gr, Tel: 0030 2810 393710

Associate Professors

Makridakis, Charalambos, Ph.D. 1989, University of Crete.
 Research Interests: Numerical solution of partial differential equations: solutions of nonlinear problems with singular behaviour; conservation laws (finite elements, finite volumes, theoretical investigation of classical schemes); linear and nonlinear wave propagation (mainly with finite elements);

space - time finite elements-mesh modification; a posteriori error control and adaptivity for time dependent problems; finite volume and conservative methods for elliptic problems. e-mail: makr@math.uoc.gr, Tel: 0030 2810 393726

• Filippas, Stathis, Ph.D. 1990, Courant Institute, New York. Research interests: Partial differential equations; dynamical systems.

e-mail: filippas@tem.uoc.gr, Tel: 0030 2810 393713

Assistant Professors

 Katsaounis, Theodoros, Ph.D. 1994, University of Tennessee.

Research interests: Numerical methods for partial differential equations: finite element methods, finite volume methods; computational fluid dynamics; scientific computing. e-mail: thodoros@tem.uoc.gr, Tel: 0030 2810 393723

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

15.5 CAREER OPPORTUNITIES FOR GRADUATES

The Applied Mathematics degree reflects the new realities of University training and will be a flexible degree in a competitive and continuously evolving job market. The graduates of the Department of Applied Mathematics will be able to find employment in the private or public sectors, in areas such as:

- o the Energy Sector
- o Technology Organizations
- o Research Centres
- o Banks
- Insurance Companies

- o Financial Institutions
- o Organizations of Environmental Management
- Departments of Research and Development of various corporations

Graduates of the Department will be in an advantageous position to follow postgraduate programmes in a variety of areas. They will have the flexibility to select either a modern professional specialty related to their specialization of study, or an academic career. This is particularly important, since the percentage of University graduates who pursue studies at the postgraduate level is high and is expected to increase further with the development of new Postgraduate Programmes.

The creation of Departments or Programmes of Applied Mathematics in recent years reflects the rapid growth of this discipline and its central role in technological and economic progress. It is worth noting that the most important Universities in Europe and the USA offer degrees in Applied and Computational Mathematics, and their graduates are in high demand.



16. DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY

Website: www.materials.uoc.gr

Departmental Secretariat

Tel: 0030 2810 394318, Fax: 0030 2810 394301

Departmental Secretary: Maria Georgiadi

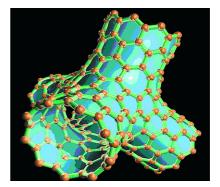
16.1 BACKGROUND OF THE DEPARTMENT

The new Department of Materials Science and Technology constitutes a high quality educational and research centre with emphasis on biomaterials, nanomaterials and nanotechnology, magnetic and electronic materials, polymers and complex fluids, and optoelectronic applications. The expertise of the present faculty covers these areas from the experimental as well as the computational points of view.

The Department is located at the University campus at Voutes, and collaborates closely with the nearby Foundation for Research and Technology Hellas (FORTH), which possesses significant infrastructure, including state-of-theart instrumentation in many closely related areas. It is expected that a Postgraduate Studies Programme will soon be offered by the Department, leading to Master's and Ph.D. Degrees. There are currently 114 undergraduate students studying at the Department.

16.2 WHAT IS MATERIALS SCIENCE AND TECHNOLOGY?

Materials Science and Technology is a relatively young interdisciplinary field, which has emerged in order to address the increasing needs of modern society with respect to the design and manufacture of complex materials that

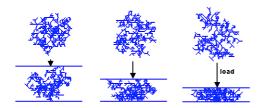


This figure shows the theoretical model of nanostructured carbon

accommodate a variety of environmental, economic, safety, durability, and efficiency constraints, in addition to the specific needs such as biocompatibility, mechanical strength, transparency, and conductivity.

The field of Materials Science researches all classes of materials with an emphasis on the correlations between the structure and the properties, processing and performance of the material. It involves the design, synthesis, characterization, control and modification of materials that meet requirements of the contemporary technical era. Such materials are utilized in the fabrication of nearly every product from mechanical constructions and machines to advanced electronics and a myriad of consumer products, new types of drugs and bioengineering materials.

In general, the production of materials comprises a great part of the gross national product (GNP) of most developed countries. This translates into excellent job opportunities in the materials field. Materials research and development will continue to play an essential role in alleviating many of the most pressing problems of today's society, such as shortage of critical raw materials and energy. New and/or dramatically improved materials will be crucial to progress in every aspect of energy generation and distribution.



This figure shows a simulated dendrimer and its changing conformation under load.

16.3 UNDERGRADUATE STUDIES

16.3.1 General Description

To be granted an undergraduate degree (equivalent to a B.Sc.) in Materials Science and Technology from the University of Crete, a student must complete course work that amounts to a total of 150 credit units. The curriculum is structured in such a way that the first four semesters include courses in fundamental sciences, i.e., mathematics, chemistry, physics, biology and computers. Then, the student is introduced to core topics such as thermodynamics, kinetics, statistical mechanics, mechanics of solids, solid state physics, and materials analysis techniques. Finally, selective courses on special topics, such as optoelectronic and photonic materials, microstructure and processing of ceramics, tissue engineering, and flow and stability of colloids, are offered.

In addition, a central element of the education is the laboratory training, which includes laboratories in basic physics, chemistry, and mechanics, as well as more advanced laboratories in microelectronics, polymers, semiconductors, superconductors, surfaces, biochemistry, biomaterials, medical applications, and laser applications for processing materials.

16.3.2 Programme of Studies

The table below provides an indication of the specific courses taken by the students in the Department. All courses in the first four semesters of the Programme of Study are compulsory courses. From the fifth semester on, the Programme includes both optional courses and compulsory elective courses (choices made from a specified list of courses). A number of courses also have prerequisites.

In the final year of studies, students have the option of doing a Senior Year Dissertation or Project.

Ist Semester	Credits	2 nd Semester	Credits
Physics I	4	Physics II	4
Mathematics I	4	Mathematics II	4
Introduction to chemistry	4	Applied Mathematics	3
Computers 0	3	Computers I	4
Materials I: past and present	3	Chemistry laboratory	4
CAD laboratory for materials	3	Organic chemistry	3
Foreign language I	I	Foreign language II	1
Total Credits	22	Total Credits	23
3 rd Semester	Credits	4th Semester	Credits
Modern physics: Introduction		Classical and statistical thermodynamics	4
to quantum mechanics	4	Physics laboratory II: Electricity, optics	3
Physics laboratory I: mechanics, heat	3	Differential equations II	3
Differential equations I	3	Materials III: Microelectronic – optoelectronic –	
Computers II	4	magnetic materials	3
Introduction to cellular biology	3	Foreign language IV	2
Materials II: polymers – colloids – biomaterials	3		
Foreign language III	I		
Total Credits	21	Total Credits	15
5th Semester	Credits	6th Semester	Credits
Introduction to condensed matter physics	4	Mechanical and thermal properties of materials	5
Materials preparation methods	5	Structural and chemical analysis of materials	4
Electromagnetism and optics	4	Optional courses	8
Optional courses	8		
Total Credits	21	Total Credits	17
7th Semester	Credits	8th Semester	Credits
Laboratory of materials characterizations	4	Compulsory elective courses	6
Compulsory elective courses	6	Optional courses	9
Optional courses	6		
Total Credits	16	Total Credits	15

16.4 FACULTY MEMBERS

Professors

 Soukoulis, Kostantinos, Ph.D. 1978, University of Chicago.

e-mail: soukouli@iesl.forth.gr, soukoulis@materials.uoc.gr, Tel: 0030 2810 391380

Associate Professors

- Giapintzakis, Ioannis, Ph.D. 1992, University of Illinois, College of Engineering, Urbana-Champaign. e-mail: giapintz@iesl.forth.gr, giapintz@materials.uoc.gr, Tel: 0030 2810 391948
- Pelekanos, Nicos, Ph.D. 1991, Brown University.
 e-mail: pelekano@materials.uoc.gr, Tel: 0030 2810 394107
- Vlassopoulos, Dimitrios, Ph.D. 1990, Princeton University. e-mail: dvlasso@iesl.forth.gr, dvlasso@materials.uoc.gr, Tel: 0030 2810 391469

Assistant Professors

Kopidakis, Giorgos, Ph.D. 1995, Iowa State University.
 e-mail: kopidaki@materials.uoc.gr, Tel: 0030 2810 394218

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs Adjunct Professors on a yearly contract basis.

16.5 LABORATORIES

The Department of Materials Science and Technology offers its students the opportunity to become familiar with modern experimental techniques in the study of structure and materials' properties. All undergraduate students of

the Department follow a series of compulsory laboratory courses, some of which are offered by the related Departments of Physics and Chemistry, while efforts are underway to develop autonomous labs, aiming at the continuous improvement of the quality of education and its adjustment to the complexity of the experimental techniques. The Department hopes in the future to offer optional educational lab classes - in addition to the compulsory labs - on subjects relating to the research activities of the new members of the teaching staff who will comprise the Department.

16.6 ADDITIONAL FACILITIES

The Research Library of the Faculty of Sciences and Engineering, with current subscriptions to the most significant international periodicals, electronic access to Greek and foreign database and thousands of monographs in all Material Sectors, comprises an essential tool for researchers, teaching staff and students. The direct cooperation between the Library of the University of Crete and the library at FORTH via internet with libraries at other Universities and Research Centres in Greece ensures the almost immediate access to magazine titles and books not existing in the Department. Finally, the reading room, open 24-hours a day, and the lending department of the library provide an environment conducive to study and a rich collection of books for the educational and cultural needs of undergraduate and postgraduate students.

FORTH is one of main national research centres in Greece and consists of six Institutes located in the cities of Heraklio, Rethymno, and Patras. FORTH belongs to the wider public sector, supervised and partly funded by the General Secretariat for Research and Technology of the Ministry of Development. Activities relevant to the Materials Science are carried out in the Institute of Electronic

Structure and Laser and the Institute of Molecular Biology and Biotechnology, and more specifically in the following laboratories: Laboratory of lasers and applications, Polymer laboratory, Laboratory for the photovoltaic conversion of solar energy, Protein structure laboratory, Laboratory of enzyme technology, and Microchemistry laboratory. In the framework of its collaboration with FORTH, the abovementioned laboratories are available to students of the Department of Materials Science and Technology either for training or for scientific research.

The University Database Processing Lab plays a supporting role in both the research and educational activities of the Department. Having as a main target the support of research, the Lab provides two user rooms equipped with many medium and higher power work stations, as well as with a "parallel machine" of high standard specifications and potentials. This equipment is assigned for researchers, both professors and students, who work in the framework of a research programme. Furthermore, the Department of Materials Science and Technology recognizes the importance of educating students on modern technological issues and more particularly of acquainting them with various applications of PCs besides standard calculations purposes. For this purpose, two Electronic Labs have been created with twenty PCs each, equipped with the latest programmes such as windows 2000 and software for various applications. The facilities are at the students' disposal for 12 hours a day and have Internet connection via the National Network of Research and Technology and via FORTHnet. In this way, the users are able to contact other researchers, institutes and individuals via e-mail, and access databases and libraries in Greece and abroad.

16.6.1 Athletic Activities for Students

The Physical Education & Athletics Bureau of the

University of Crete informs students of all the Departments of the University about different sports and offers them the chance to participate in various athletic activities such as football, basketball, volleyball, ping pong, chess, swimming and others. The University of Crete organizes internal championships with groups comprised of students from one or more departments. The championships are monitored by referees from local unions and national rules are applied. In addition, the Physical Education and Athletics Bureau cooperates with different athletics associations to teach the University students (e.g., Heraklio Yachting Club for the acquisition of Open Sea Diploma, Heraklio Sailing Club for rowing). The University of Crete participates in all Pan-Hellenic Students Championships (organized by the Athletics Committee of Tertiary Education sponsored by the Ministry of Education).

In 1999 the Physical Education and Athletics Bureau promoted the participation of the University of Crete in athletic activities abroad for the first time. The first meeting took place in Cyprus in May 1999 with the participation of the University's Football Team in the tournament with the Universities of Cyprus.

Specialized Teaching Personnel for the Physical Education and Athletics Bureau

 Zaharioudakis, Stelios, Magister Artium 1992 in Physical Education, University of Frankfurt, Sport Manager 1994, Institute for Sports and Tourism, Dusseldorf.
 Research interests: Organization of university athletics.

e-mail: unisport@admin.uch.gr, Tel: 0030 2810 393427

16.7 CAREER OPPORTUNITIES FOR GRADUATES

Materials science and technology graduates can be employed in a wide range of industries and technology

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businesses, such as those involved with metals (steel, aluminium), ceramics (tiles, insulation), glass (and fibre optics), polymers (formation, properties, polymers of wide applications, mechanic plastics), electronic materials (microelectronics, opto-electronics, batteries, cables, magnetic materials etc.), colloids (paint, medicine), and biomaterials (biosustainable products, prosthetics, biomedical applications).

Public and private power and telecommunications organizations can also employ materials scientists, since research and development of new and/or altered materials

will be crucial to progress in every aspect of energy generation and distribution. Services of the wider public field need materials scientists to design and control materials specifications and constructions. In addition, due to their interdisciplinary education, graduates can teach Physics, Chemistry, basic Biology, Technology of materials and processes and other related subjects. Finally, graduates will be qualified to prepare relevant studies and to participate in materials quality control boards for constructions of various types.



FACULTY OF MEDICINE

DEPARTMENT:

→ Medicine



17. DEPARTMENT OF MEDICINE

Website: www.med.uoc.gr

Departmental Secretariat

Tel: 0030 2810 394510

Departmental Secretary: Maria Simina-Dermitzaki

17.1 BACKGROUND OF THE DEPARTMENT

The Faculty of Medicine of the University of Crete was established with the aim of becoming a modern teaching centre committed to excellence in education and the training of students, physicians and biomedical scholars. During the twenty years of its existence, it has established multiple activities in education, research, and health care and has collaborated with scientific and social sectors in Greece and abroad.

The Faculty of Medicine was established in 1983 and received its first students in 1984. Since 1989, it has been operating at its new campus, located about 7 km from Heraklio, and representing one of the newest medical and research complexes in Greece. The campus includes a spacious and functional 24,000 square meter, ten-wing building and a modern, well-equipped 62,000 square meter University Hospital. Its library includes more than 2,000 titles and 450 biomedical journals. An on-line system provides access to major international databases.

The Faculty consists of ten Divisions: Basic Sciences, Morphology, Laboratory Medicine, Radiology, Internal Medicine, Surgery, Mother and Child Health, Neurology and Sensory Organs, Psychiatry and Behavioral Sciences, and Social Medicine.



In the Faculty of Medicine the teaching staff includes 120 faculty members of whom 34 are Professors, 28 are Associate Professors, 42 are Assistant Professors and 16 are Lecturers; the Faculty also has three foreign language teachers. In addition the permanent staff includes Administrative Staff and Specialized Technical Personnel. There are also specific committees that include: Undergraduate Studies, Graduate Studies, Ethics, Library, Informatics/Computers, Public Relations and International Student Exchanges, Cultural Activities, Student Transfers, Student Employment - Athletics and others.

The achievements of the Faculty of Medicine in education, research and patient care are numerous. The Faculty has also achieved international recognition, as evidenced by the participation of several of its staff members in the executive boards, administrative committees and councils of European or global scientific associations and professional organizations. Faculty members are active members of the Editorial Boards of scientific journals as well as the decision-making bodies of funding institutions. Last but not least, several Divisions of the Faculty of Medicine and individual faculty members have a longstanding collaboration with the World Health Organization (both the global Headquarters and the Regional Office for Europe) and with the Commission of the European Union.

The following non-profit Associations have been developed by faculty and staff members and play a significant role in promoting a close relationship between the medical community and the city of Heraklio.

- The Cultural Association of the Faculty of Medicine whose main goal is to establish a Medical History Museum as well as to study and promote the evolution of Medicine in Crete as a centre of reference in the Eastern Mediterranean Region
- · The Association of the Friends of the Faculty of Medicine

that has been quite active in supporting and funding social and humanitarian causes in response to local needs

17.2 MILESTONES

- 1983 Foundation of the Faculty of Medicine
- 1984 Admission of the first 91 students
- 1985 Appointment of the first 19 members of teaching staff
- 1989 Inauguration of the University Hospital
- 1990 Inauguration of the new campus of the Faculty of Medicine
- 1990 Awarding of Diplomas to the first 33 graduates

17.3 UNDERGRADUATE STUDIES

17.3.1 Basic Sciences Curriculum

The programme of studies lasts for six years. Balanced emphasis is given to Basic Sciences (semesters 1-4), Laboratory Medicine (semesters 4-7), Pre-clinical Training (semesters 6-8) and Clinical training (semesters 9-12). Foreign language courses are also offered. During the first two years (four semesters) of the undergraduate curriculum, the courses (physics, chemistry, biology, anatomy, histology, physiology, pathophysiology and others) provide the background to the basic disciplines required to understand the normal human body systems and the disturbance caused by disease processes.

The curriculum also introduces the students to the social determinants of health and to the organization of health care services in different countries.

17.3.2 Pre-Clinical Curriculum

The next two years (four semesters) are devoted to

the Pre-Clinical courses. They cover the laboratory sciences (e.g., pathology, microbiology, radiology), public health (e.g., epidemiology, nutrition) and the preparatory courses for the clinical disciplines (e.g., internal medicine, surgery, psychiatry, pediatrics).

17.3.3 Clinical Curriculum

The Clinical Curriculum covers the fifth and sixth years (four semesters). During these two years, students rotate between clinics in all the Divisions of the University Hospital, gradually developing their clinical problem-solving abilities, by working as junior members of the medical care team. The clinical clerkships involve Internal Medicine (4 months), Surgery (4 months), Pediatrics (10 weeks), Obstetrics and Gynaecology (6 weeks), Neurology and Psychiatry (one month each), Ophthalmology and ENT (2 weeks each).

The Faculty of Medicine of the University of Crete is the only faculty in Greece that provides a clinical clerkship in Primary Health Care (PHS) and Family Medicine (4 weeks), preparing students for medical practice outside the hospital. This takes place in 11 collaborating Health Centres on the island of Crete. The PHS training has been incorporated in the EPEAEK Programme of Practical Training of the Ministry of Education (June, 1997). Four hundred and thirty-one students have participated so far.

In addition, the Faculty of Medicine of the University of Crete is the only faculty providing training in Intensive and Emergency care (5th year). It has a fully equipped laboratory of cardio-respiratory resuscitation, and trains students in emergency medical conditions.

17.4 POSTGRADUATE STUDIES

The Faculty of Medicine offers Postgraduate Programmes leading to a Master's or doctoral degree. Graduates of the

Faculties of Medicine, Sciences and related disciplines can be candidates. The programmes listed below are funded by the Ministry of Education.

17.4.1 Postgraduate Programme in Medical Physics-Radiation Medical Physics

This is an inter-departmental programme with the participation of: the Faculty of Medicine, University of Crete; the Faculty of Medicine, Aristotle University of Thessaloniki; the Faculty of Medicine, University of Ioannina; and the Faculty of Medicine, University of Athens. It also collaborates with two scientific-research organizations, the Greek Committee of Atomic Energy and the EKEFE "Dimokritos". This programme aims at training graduates in Medical Physics-Radio Physics.

17.4.2 Postgraduate Programme in Molecular Biology-Biomedicine

This is an inter-departmental programme which has been run in collaboration with the Department of Biology and the Institute of Molecular Biology and Biotechnology since 1994. This postgraduate programme aims at preparing well-trained scientists, interested in pursuing a career in the research and teaching of Biology/Biomedicine.

17.4.3 Postgraduate Programme in Neurosciences

This programme has been active since 1994, in the framework of the Faculty of Medicine with collaborations with major laboratories in Greece and abroad. Its objective is the study of the nervous system, with two main directions:
a) cellular-molecular neurosciences, and b) developmental neurosciences and the molecular basis of disease.

17.4.4 Newly Funded Programmes

Five new postgraduate programmes were funded by the Ministry of Education in 2002.

a. Bioethics

The objective of this programme is to train graduates of different disciplines of science in issues pertaining to bioethics. It is an interdepartmental programme organized by the Department of Philosophy and Social Sciences, the Faculty of Medicine, the Department of Biology and the Department of Sociology, all within the University of Crete. When successfully completed, the programme leads to a Master's degree in bioethics.

b. Brain and Mind

This programme aims to train scientists in the Biological and Computational Sciences of the Brain and in Cognitive Sciences. It is an interdepartmental programme organized by the Faculty of Medicine, Department of Computer Science, Department of Physics, and Department of Philosophy and Social Studies of the University of Crete; the Department of Nursing of the University of Athens; and the Department of Methodology, History and Theory of Science of the University of Athens.

c. Clinical Investigation (Clinical and Genetic Aetiology, Diagnosis and Treatment of Human Diseases

The objective of this programme is to: a) provide advanced experience in the investigation of human diseases; b) bridge the gap between basic and clinical research; and c) train future basic and clinical research.

d. Optics and Vision

The purpose of this programme is to train graduates of different disciplines of science in the physiology of vision,

optics and mathematical simulations. It is an interdepartmental programme organised by the Faculty of Medicine and the Departments of Physics and Mathematics of the University of Crete.

e. Public Health

The objective of the Master's Course in Public Health and Services Management is to educate scientists capable of contributing, with their knowledge and skills, to the promotion of the health of the population through collective and social activities, and to the better management of health services and to research.

17.4.5 Ph.D. Degrees

Students with a Bachelor's or Master's degree can apply to the Ph.D. programme. After the completion of an original research project and at least one publication of the results in a peer-reviewed journal, the graduate students defend their theses in the presence of a seven-member examination committee and obtain their Ph.D. A large number of students (866) have started their postgraduate studies; 241 of them have already graduated.

17.5 FACULTY MEMBERS

17.5.1 Basic Sciences

Laboratory of Biochemistry

Stournaras, Christos, Professor of Biochemistry, Ph.D.
 1979, University of Freibourg.

e-mail: cstourn@med.uoc.gr, Tel: 0030 2810 394563, Fax: 0030 2810 394530

Cell signalling pathways and actin cytoskeleton; regulation of cytoskeleton dynamics; role of actin in neoplasia and metastasis; drug targeting and molecular diagnostics on actin signalling.

• Zannis, Vassilis, Professor of Biochemistry, Ph.D. 1975, University of California at Berkeley.

e-mail: vzannis@acs.bu.edu, Tel: 0030 2810 394553, Fax: 0030 2810 394530

Structure and function of apolipoprotein and regulation of their genes: a) Role of apoAI in the biogenesis and functions of HDL, b) Role of apoE in atherogenesis and in Alzheimer's disease, c) role of hormone nuclear receptors in the regulation of the apolipoprotein genes in vivo.

 Kardasis, Dimitrios, Assist. Professor of Biochemistry, Ph.D. 1991, Boston University.

e-mail: kardasis@imbb.forth.gr, Tel: 0030 2810 394549, Fax: 0030 2810 394530

Transcriptional regulatory mechanisms mediating the cellular responses to the TGFbeta and the p53 signalling pathways; regulation of genes involved in lipid metabolism.

• Theodoropoulos, Panayiotis, Assist. Professor of Biochemistry, Ph.D. 1986, University of Lille 1.

e-mail: takis@med.uoc.gr, Tel: 0030 2810 394546, Fax: 0030 2810 394530

Organisation and function of the nuclear envelope; the role of microtubules, tubulin and anti-mitosic drugs in the dynamic breakdown and reconstruction of the nuclear envelope during cell division.

Laboratory of Chemistry

 Mavrothalassitis, Georgios, Assoc. Professor of Chemistry, Ph.D. 1987, University of Thessaloniki.

e-mail: mavro@med.uoc.gr, Tel: 0030 2810 394537, Fax: 0030 2810 394530

Transcriptional regulation and intracellular signalling; ETS oncogenes in the framework of ras/MAPK during cell proliferation and differentiation.

Laboratory of Molecular Biology and Genetics

• Savakis, Charalambos, Professor of Molecular Biology and Genetics, Ph.D. 1981, Harvard Medical School. e-mail: savakis@med.uoc.gr, Tel: 0030 2810 394535, Fax: 0030 2810 394530

Molecular genetics of Drosophila and other insects; genetics engineering for insects of medical and economic importance; structure and function of transposable elements.

Laboratory of Neurosciences

Karagogeos, Domna, Assoc. Professor of Neurosciences,
 Ph.D. 1986, Harvard University.

e-mail: karagoge@med.uoc.gr, Tel: 0030 2810 394542, Fax: 0030 2810 394530

Molecular and cell biology of axon guidance and neuronal migration; functional studies of transcription factors in central nervous system development.

Laboratory of Pharmacology

enzymes.

• Gravanis, Achileas, Professor of Pharmacology, Head, Ph.D. 1983, University Pierre & Marie Curie 6. e-mail: gravanis@med.uoc.gr, Tel: 0030 2810 394521, Fax: 0030 2810 394530

Apoptosis and signal transduction in neurodegeneration processes of neural and neuroendocrine cells; pharmacology of stress, stress neuropeptide and neurosteroid agonists and antagonists; pharmacogenomics of drug metabolizing

• Katerinopoulou-Thermos, Kyriaki, Assoc. Professor of Pharmacology, Ph.D. 1984, New York University. e-mail: thermos@med.uoc.gr, Tel: 0030 2810 394533, Fax: 0030 2810 394530

Molecular characterization of somatostatinergic receptors in brain and retina; mechanisms regulating somatostatin release; role of somatostatin in the pathophysiology of CNS disorders.

 Liapakis, Georgios, Assist. Professor of Pharmacology, Ph.D. 1994, University of Crete.

e-mail: liapakis@med.uoc.gr, Tel: 0030 2810 394525,

Fax: 0030 2810 394530

Elucidation of the structure and function of G-protein coupled receptors.

 Zachariou, Venetia, Assist. Professor of Pharmacology, Ph.D. 1995, Medical College of Georgia.

e-mail: vzachar@med.uoc.gr, Tel: 0030 2810 394527,

Fax: 0030 2810 394530

Modulation of opiate and dependence by regulators of G protein signalling (RGS proteins); changes in the opiate receptor signalling at the level of the spinal cord following chronic pain; the neuropeptide galanin as a target for the treatment of morphine dependence.

Laboratory of Physiology

Moschovakis, Antonios, Professor of Physiology, Ph.D.
 1987, Washington University, St. Louis.

e-mail: moschov@med.uoc.gr, Tel: 0030 2810 394509,

Fax: 0030 2810 394530

Neurophysiology of ocular, arm and walking movement; compartment and neural network modelling of brain processes; track tracing and neural morphology.

• Savaki, Eleni, Professor of Physiology, Ph.D. 1976, University of Athens.

e-mail: savaki@med.uoc.gr, Tel: 0030 2810 394513,

Fax: 0030 2810 394530

Functional brain imaging of the primate brain during voluntary arm and eye movements; cortical pathways involved in: a) visually, and b) somatosensorily guided reaching movements, c) execution, and d) recognition of grasping movements, e) saccadic eye movements of various amplitudes and directions; methodological development for

reconstruction of two- and three-dimensional brain images from autoradiographic sections of the primate brain.

 Christakos, Constantinos, Assoc. Professor of Physiology, Ph.D. 1980, Kings College-Chelsea College.

e-mail: ccnncc@med.uoc.gr, Tel: 0030 2810 394502, Fax: 0030 2810 394530

Experimental and modelling studies of neuromuscular mechanisms and spinal motor systems; analysis and modelling of the function of the respiratory pattern generator.

 Dalezios, Ioannis, Lecturer of Physiology, Ph.D. 1992, University of Patras.

e-mail: dalezios@med.uoc.gr, Tel: 0030 2810 394504,

Fax: 0030 2810 394530

Electron microscopy; physiology and anatomy of the oculomotor system; two-dimensional, high-resolution metabolic maps of the monkey brain.

17.5.2 Internal Medicine

Cardiology

 Vardas, Panagiotis, Professor of Cardiology, Head, Ph.D. 1979, University of Athens.

e-mail: cardio@med.uoc.gr, Tel: 0030 2810 392428, Fax: 0030 2810 542055

 Parthenakis, Fragiskos, Assist. Professor of Cardiology, Ph.D. 1994, University of Crete.

e-mail: fparth@med.uoc.gr, Tel: 0030 2810 392422, Fax: 0030 2810 394796

 Manios, Emmanouel, Assist. Professor of Cardiology, Ph.D. 1995, University of Crete.

e-mail: mman@med.uoc.gr, Tel: 0030 2810 392422, Fax: 0030 2810 394796

Clinical electrophysiology of the heart; pathophysiology and therapeutics of the arrythmias; syncopal episodes of

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bradyarrythmic or tachyarrythmic origin, predisposing factors of sudden death; autonomous nervous systems disorders in patients with heart failure.

Dermatology

- Toska, Androniki, Professor of Dermatology, Head, Ph.D. 1978, University of Athens.
- e-mail: derma@med.uoc.gr, Tel: 0030 2810 392429, Fax: 0030 2810 392429
- Krasagakis, Konstantine, Assist. Professor of Dermatology, Ph.D. 1991, Freie Universitaet, Berlin.

e-mail: krasagak@med.uoc.gr, Tel: 0030 2810 392429, Fax: 0030 2810 392429

Allergic cutaneous vasculitis; skin cancer; photophysics and photobiology of the skin; cutaneous lymphomas.

Endocrinology and Metabolic Diseases

• Papavasileiou, Efstathios, Assoc. Professor of Endocrinology, Head, Ph.D. 1979, University of Athens. e-mail: papavasi@med.uoc.gr, Tel: 0030 2810 392437, 394670, Fax: 0030 2810 392437

Reproductive endocrinology; diabetes mellitus; thyroid diseases; systems theory on endocrinology.

<u>Gastroenterology</u>

- Kouroumalis, Elias, Professor of Gastroenterology, Head, Ph.D. 1975, University of Athens.
- e-mail: kouroum@med.uoc.gr, Tel: 0030 2810 394634, Fax: 0030 2810 542085
- Kolios, Georgios, Assist. Professor of Gastroenterology, Ph.D. 1992, University of Athens.

e-mail: gkolios@med.uoc.gr, Tel: 0030 2810 392253/54, 2810 542085, Fax: 0030 2810 394796

· Mouzas, Ioannis, Assist. Professor of Gastroenterology,

Ph.D. 1984, University of Athens.

e-mail: mouzas@med.uoc.gr, Tel: 0030 2810 392100, Fax: 0030 2810 394796

Epidemiology of IBD; the role of macrophage in IBD; non endocrine functions of somatostatin in liver and large bowel disease; biology of Kuppfer cells; pathogenesis of chronic hepatitis and cirrhosis.

Haematology

- Heliopoulos, Georgios, Professor, Head, Ph.D. 1981, University of Athens.
- e-mail: gell@med.uoc.gr, Tel: 0030 2810 394632, Fax: 0030 2810 394796
- Alexandrakis, Michail, Assist. Professor, Ph.D. 1988, University of Athens.
 e-mail: alexand@med.uoc.gr, Tel: 0030 2810 392111, Fax: 0030 2810 394796
- Papadaki, Eleni, Assist. Professor, Ph.D. 1995, University of Crete.

e-mail: epapadak@med.uoc.gr, Tel: 0030 2810 392111, Fax: 0030 2810 394796

Pathogenesis of chronic idiopathic neutropenias, NK-cells in myelodysplastic syndromes; immune abnormalities in multiple myeloma.

Internal Medicine

 Boumpas, Dimitrios, Professor, Head, Ph.D. 1986, University of Ioannina.

e-mail: Boumpasd@med.uoc.gr, Tel: 0030 2810 394796, Fax: 0030 2810 394796

 Samonis, Georgios, Professor, Ph.D. 1980, University of Athens.

e-mail: samonis@med.uoc.gr, Tel: 0030 2810 392747, Fax: 0030 2810 392802

• Ganotakis, Emmanouel, Assist. Professor, Ph.D. 1988, University of Athens.

e-mail: ganotak@med.uoc.gr, Tel: 0030 2810 392111, Fax: 0030 2810 394796

 Gikas, Achilleas, Assist. Professor, Ph.D. 1988, University of Athens.

e-mail: gikas@med.uoc.gr, Tel: 0030 2810 394624, Fax: 0030 2810 394796

• Diamantis, Ioannis, Assist. Professor, Ph.D. 1989, University of Basel.

e-mail: idiamant@med.uoc.gr, Tel: 0030 2810 394626, Fax: 0030 2810 394796

Hypertension; infectious diseases; diabetes mellitus; pathogenesis, natural history and biologic therapy of autoimmune autoinflammatory diseases (lupus nephritis, psoriatic and rheumatoid arthritis); immunotherapy/biologic therapy of allergic diseases.

Medical Oncology

 Georgoulias, Vassilios, Professor, Head, Ph.D. 1981, University of Athens.

e-mail: georgoul@med.uoc.gr, Tel: 0030 2810 394573, Fax: 0030 2810 394582

T-lymphocyte function; breast, lung and colorectal cancer; immune suppression; fungal infections in cancer patients.

Nephrology

- Tsaparas, Nikolaos, Assoc. Professor, Head, Ph.D. 1968, University of Athens.
- e-mail: nefrolog@med.uoc.gr, Tel: 0030 2810 394770, 394576, Fax: 0030 2810 394796
- Dafnis, Evgenios, Assist. Professor, Ph.D. 1984, University of Athens.

e-mail: nefrolog@med.uoc.gr, Tel: 0030 2810 392418, 2810 392605

Biology of podocytes; mechanisms of glomerular immune injury; small vessel vasculitis.

Rheumatology, Clinical

Thoracic Medicine

 Siafakas, Nikolaos, Professor, Head, Ph.D. 1976, University of Athens.

e-mail: siafakas@med.uoc.gr, Tel: 0030 2810 394670, 392433, Fax: 0030 2810 542650

 Froudarakis, Marios, Lecturer, Ph.D. 1997, University of Crete.

e-mail: mfroud@med.uoc.gr, Tel: 0030 2810 392433, Fax: 0030 2810 542650

Physiology of respiratory muscles; disorders of breathing during sleep; molecular biology and genetics of respiratory diseases; mechanisms of pulmonary involvent of collagen vascular diseases; mechanisms and treatment modalities of pleural infection.

17.5.3 Laboratory Medicine

<u>Laboratory of Clinical Bacteriology, Parasitology, Zoonoses</u> and Geographical Medicine

 Tselentis, Ioannis, Professor, Head, Ph.D. 1972, University of Athens.

e-mail: tselenti@med.uoc.gr, Tel: 0030 2810 394738, 394586, Fax: 0030 2810 394740

 Antoniou, Maria, Assist. Professor, Ph.D. 1983, London University.

e-mail: antoniou@med.uoc.gr, Tel: 0030 2810 394746, Fax: 0030 2810 394839

Molecular mechanisms and epidemiology of bacterial antibiotic resistance; research on leishmaniasis, toxoplasmosis, brucellosis, ricketsiosis; macrobiological analysis of food; water and environmental samples; development of

HACCP (Hazard Analysis Critical Control Points) models and shelf life evaluation of new products in food and water industry.

Laboratory of Clinical Chemistry and Biochemistry

 Margioris, Andreas, Professor, Head, Ph.D. 1975, University of Athens.

e-mail: andym@med.uoc.gr, Tel: 0030 2810 394588

 Tsatsanis, Christos, Lecturer, Ph.D. 1995, University of Glasgow.

e-mail: tsatsani@med.uoc.gr, Tel: 0030 2810 394833

The role of stress-related hormones on the adrenals; molecular mechanisms of neuropeptide-induced apoptosis; neuroendocrine-immune system interactions; the role of stress-related hormones in inflammation; molecular mechanisms of macrophage activation-cytokine production; effects of neuropeptides in inflammation; modulation of the immune response against cancer by tumour derived neuropeptides.

Laboratory of Clinical Virology

 Spantidos, Dimitrios, Professor, Head, Ph.D. 1976, Mc Gill University.

e-mail: spandido@med.uoc.gr, Tel: 0030 2810 394633, 394831

Hepatitis viruses; herpes viruses; AIDS viruses; cellular and viral oncogens.

Laboratory of Experimental Endocrinology

 Castanas, Elias, Professor, Head, Ph.D. 1978 University of Athens; 1980 University Aix-Marseille II; 1981 University Aix-Marseille II; 1985 University Aix-Marseille II.

e-mail: castanas@med.uoc.gr, Tel: 0030 2810 394584, 394586. Fax: 0030 2810 394581

· Hatzoglou, Anastasia, Assist. Professor, Ph.D. 1993,

University of Crete.

e-mail: hatzoglu@med.uoc.gr, Tel: 0030 2810 3944515, 394586

Breast cancer; modulatory mechanisms-neuropeptides, antioxidants; hormone modulation of neoplasia; biological rhythms; non-linear analysis; immunoregulatory effects of opioids; biological function of BCMA (new TNF receptor).

Laboratory of Haematology

 Mavroudis, Dimitrios, Assist. Professor, Head, Ph.D. 1997, University of Crete.

e-mail: mavrudis@med.uoc.gr, Tel: 0030 2810 392584

Detection of occult disseminated epithelial tumour cells in the peripheral blood and bone marrow of patients with solid tumours; evaluation of their prognostic significance as well as immunophenotypic and molecular analysis of their biological characteristics.

17.5.4 Morphology

Anatomy, Neuroanatomy and Embryology

 Karabelas, Athanasios, Assoc. Professor, Ph.D. 1985, University of Patras.

e-mail: karabel@med.uoc.gr, Tel: 0030 2810 394719, Fax: 0030 2810 394700

- Siatitsas, Ioannis, Assoc. Professor e-mail: vssiatit@med.uoc.gr, Tel: 0030 2810 394716, Fax: 0030 2810 542039
- Myrillas, Petros, Lecturer, Ph.D. 1997, University of Patras.

e-mail: pmirilas@med.uoc.gr, Tel: 0030 2810 394836, Fax: 0030 2810 394700

Neurobiology; neuroanatomy; embryology; microsurgery; educational methods in anatomy.

Histology

Tzanakakis, Georgios, Assoc. Professor, Head, Ph.D.
 1990, University of Patras.

e-mail: tzanakak@med.uoc.gr, Tel: 0030 2810 394798, Fax: 0030 2810 394798

Human histology; ultrastructure and cell biology; techniques used in histology and cell biology.

Pathology

• Delides, Georgios, Professor, Head, Ph.D. 1969, University of Athens.

e-mail: delides@med.uoc.gr, Tel: 0030 2810 494699, Fax: 0030 2810 394700

• Stathopoulos, Efstathios, Assoc. Professor, Ph.D. 1984, University of Athens.

e-mail: stathope@med.uoc.gr, Tel: 0030 2810 394692, Fax: 0030 2810 394700

 Kalogeraki, Alexandra, Assist. Professor, Ph.D. 1989, University of Athens.

e-mail: kalogera@med.uoc.gr, Tel: 0030 2810 394701, Fax: 0030 2810 394700

Quantitative pathology; morphometry and image analysis; molecular pathology; haematopathology; immunohistochemistry.

Forensic Sciences

I. Laboratory of Forensic Pathology and Medical Ethics

• Michalodimitrakis, Emmanouel, Assoc. Professor, Head, Ph.D. 1979, University of Athens.

e-mail: michalodi@med.uoc.gr, Tel: 0030 2810 394678, Fax: 0030 2810 394689

• Steiakakis, Ioannis, Assist. Professor, Ph.D. 1987, University of Athens.

e-mail: stiak@med.uoc.gr, Tel: 0030 2810 394660, Fax: 0030 2810 394660

Introduction to medical ethics; legal aspects of medical practice; scene investigation; external and internal examination of the body; autopsy report; sudden deaths; blunt force injuries; sharp force injuries; gunshot and shotgun wounds; traffic accidents; mass disasters; thermal injuries, burns, hypothermia; electrocution, lighting; asphyxia, drug abuse, investigation of drug deaths; poisoning; forensic toxicology (principles and toxicological analysis of post-mortem samples and interpretation of the results); forensic genetics (paternity, DNA, fingerprinting); population genetics.

2. Laboratory of Toxicology

Tsatsakis, Aristides, Assoc. Professor, Head, Ph.D.
 1986, Mendeleyev University.

e-mail: aris@med.uoc.gr, Tel: 0030 2810 394679, Fax: 0030 2810 394700

General principles of toxicology (mechanisms and testing of toxicity, toxicokinetics); antidotes and methods of the organism detoxification; clinical toxicology; pesticide toxicology; basics of molecular toxicology; chemical carcinogenesis; regulatory toxicology; risk assessment; toxicology of chemical warfare agents; anabolics; alcohol and drugs of abuse; plant and animal toxins; methodology of toxicological analysis (chromatography, mass-spectrometry, immunoassays, molecular techniques); laboratory exercise.

17.5.5 Mother and Child Health

<u>Neonatology</u>

 Christina Giannakopoulou, Assist. Professor, Head, Ph.D. 1984, University of Athens.

e-mail: gianakop@med.uoc.gr, Tel: 0030 2810 392608 2810 392608

Supportive care of premature neonates; respiratory distress syndrome.

Obstetrics and Gynaecology

 Koumantakis, Evgenios, Professor, Head, Ph.D. 1976, University of Athens.

e-mail: obgyn@med.uoc.gr, Tel: 0030 2810 394591/3, 394598/9, Fax: 0030 2810 392759

Makrygiannakis, Antonios, Assist. Professor, Ph.D.
 1994, University of Crete.

e-mail: magkrigia@med.uoc.gr, Tel: 0030 2810 392333, Fax: 0030 2810 394796

 Mattaliotakis, Ioannis, Assist. Professor, Ph.D. 1989, University of Thessaloniki.

e-mail: Marakgr@med.uoc.gr, Tel: 0030 2810 394597, Fax: 0030 2810 392331

 Relakis, Konstantinos, Assist. Professor, Ph.D. 1982, University of Athens.

e-mail: relakisk@med.uoc.gr, Tel: 0030 2810 392332, Fax: 0030 2810 394796

Laser applications for gynaecological cancer; oncogenes in gynaecological cancer; prenatal diagnosis; cellular aspects of endometrium implantation; autoimmunity basis in infertility; laparoscopic and hysteroscopic surgery of infertility; laser laparoscopy; evaluation of infertility; assisted reproductive technologies; prenatal fetal monitoring; amniocentesis.

Pediatrics

- Sbyrakis, Stylianos, Professor of Pediatrics, Head e-mail: sbyrakis@med.uoc.gr, Tel: 0030 2810 394665, Fax: 0030 2810 392827
- Matzourani, Evangelia, Assoc. Professor, Ph.D. 1974, University of Athens.

e-mail: matzura@med.uoc.gr, Tel: 0030 2810 394672, Fax: 0030 2810 392290

Michelogiannis, Iossif, Assoc. Professor, Ph.D. 1979,

University of Athens.

e-mail: mixelogj@med.uoc.gr, Tel: 0030 2810 394661/2, Fax: 0030 2810 3944796

 Galanakis, Emmanouel, Assist. Professor, Ph.D. 1993, Medical School, University of Ioannina; 1996 Department of Philosophy, University of Ioannina.

e-mail: galanak@med.uoc.gr, Tel: 0030 2810 392608, Fax: 0030 2810 392827

Micro-organisms of low virulence; epidemiology of infectious diseases; host's response to infection; metabolic bone disease; inborn errors of metabolism-organic acidurias; childhood nephrolithiasis; cystic fibrosis; diabetes mellitus Type I; learning disabilities; brain dysfunction in childhood; childhood epilepsy; risk factors in development of childhood asthma and rhinitis; phenotypes of asthma; risk factors in severity of asthma and rhinitis; clinical outcome of primary immunodeficiences; association of rhinitis and asthma; asthma treatment results by following international treatment guidelines.

Electroencephalographic, magnetoencephalographic signal analysis; signal analysis: use of different signal analysis methods such as spectral analysis (power spectrum and coherence), non-linear methods such as dimension, Kolmogorov entropy, Lyapunov exponents, prediction, synchronisation; also, artificial neural networks, expert systems, independent component analysis, brain mapping using electroencephalographic signals and image processing.

Pediatric Haematology - Oncology

Kalmanti-Papachatzi, Maria, Professor, Head, Ph.D.
 1977, University of Athens.

e-mail: pedhem@med.uoc.gr, Tel: 0030 2810 394673/64, Fax: 0030 2810 394673

• Dimitriou, Eleni, Assist. Professor, Ph.D. 1988,

University of Athens.

e-mail: lena@med.uoc.gr, Tel: 0030 2810 394663/4, 394666/7, 394674. Fax: 0030 2810 394673

• Steiakaki, Eftichia, Assist. Professor, Ph.D. 1997, University of Crete.

e-mail: efstel@med.uoc.gr, Tel: 0030 2810 392852, Fax: 0030 2810 392778

Bone marrow, PBSC and cord blood stem cells and transplantation; haematopoietic stem cells assays and biology; late effects of cancer chemotherapy; supportive care in immuno-suppressed children; graft evaluation and laser photodynamic purging; evaluation of cytokines, growth factors and other molecules in childhood diseases; oncogenes in childhood malignancies; stem cell plasticity; angiogenesis in childhood leukemia; morphometry and spectral imaging studies in blood diseases.

17.5.6 Neurology and Sensory Organs

ENT

- Chelidonis, Emmanouel, Professor, Head e-mail: emmhelid@med.uoc.gr, Tel: 0030 2810 394641/43, Fax: 0030 2810 542106
- Bizakis, Ioannis, Assoc. Professor, Ph.D. 1990, University of Crete.

e-mail: jbizakis@med.uoc.gr, Tel: 0030 2810 394656, Fax: 0030 2810 542106

 Velegrakis, Georgios, Assoc. Professor, Ph.D. 1989, University of Thessaloniki.

e-mail: gvel@med.uoc.gr, Tel: 0030 2810 394639, Fax: 0030 2810 542106

• Christodoulou, Panagiotis, Assist. Professor, Ph.D. 1980, University of Crete.

e-mail: christop@med.uoc.gr, Tel: 0030 2810 394641/43, Fax: 0030 2810 542106

Laser thermo-chondroplasty; Excimer laser 193nm applications; hearing, balance and speech disorders in the population of Crete; otolaryngology of ancient Cretans.

Neurology

 Plaitakis, Andreas, Professor, Head, Ph.D. 1981, University of Athens.

e-mail: plaitak@med.uoc.gr, Tel: 0030 2810 394647/48, Fax: 0030 2810 394839

 Amoirides, Georgios, Assist. Professor, Ph.D. 1988, University of Ruhr-Bochum.

e-mail: amoirid@med.uoc.gr, Tel: 0030 2810 394651, Fax: 0030 2810 394839

 Evangeliou, Athanasios, Assist. Professor, Ph.D. 1990, University of Frankfurt.

e-mail: evangeli@med.uoc.gr, Tel: 0030 2810 394651, 394647. Fax: 0030 2810 394839

Molecular basis of neurodegenerative disorders; structure and function of the glutamate dehydrogenase multigene family; molecular biology of Huntington's disease; molecular biology of Parkinson's disease; molecular biology of epilepsy; pathogenesis of vascular cerebral disorders; human inborn errors of metabolism; neuromuscular disorders; neurobiology of motor neuron disorders.

Neurosurgery

- Markakis, Evangelos, Professor, Head, Ph.D. 1965, Christian-Albrechts University.
- e-mail: marka@med.uoc.gr, Tel: 0030 2810 394656, 542059, Fax: 0030 2810 394839
- Vakis, Antonios, Lecturer, Ph.D. 1988, University of Athens.

e-mail: vakisant@ath.forthnet.gr, Tel: 0030 2810 392819, 542059, Fax: 0030 2810 542059

Ongoing clinical protocol for patients with malignant brain tumours using a combination of intratumoral chemotherapy and external radiotherapy; study of the brain extracellular biochemistry in epilepsy using the method of microdialysis; combination of functional MRI and neuronavigation in the surgical treatment of brain tumours near eloquent regions.

Ophthalmology

- Pallikaris, Ioannis, Professor, Head, Ph.D. 1981, University of Zurich.
- e-mail: pallikar@med.uoc.gr, Tel: 0030 2810 394650, Fax: 0030 2810 394653
- Tsilimbaris, Miltiades, Assist. Professor, Ph.D. 1994, University of Crete.

e-mail: tsilimb@med.uoc.gr, Tel: 0030 2810 394630/52, Fax: 0030 2810 392730

Siganos, Charalambos, Lecturer, Ph.D. 1999, University of Crete.

e-mail: csiganos@med.uoc.gr, Tel: 0030 2810 392739, Fax: 0030 2810 394653

Refractive surgery; photodynamic therapy; ophthalmic imaging; senile macular degeneration.

17.5.7 Psychiatry and Behavioral Sciences

Psychiatry

- Vgontzas, Alexandros, Professor, Head, Ph.D. 1999, University of Athens.
- e-mail: vgontzas@med.uoc.gr, Tel: 0030 2810 394617, Fax: 0030 2810 394617
- Paritsis, Nikolaos, Assoc. Professor, Ph.D. 1971, University of Athens; 1979, Brunel.

e-mail: paritsis@med.uoc.gr, Tel: 0030 2810 394610/16, Fax: 0030 2810 394617

• Bitsios, Panayiotis, Assist. Professor, Ph.D. 1997, Nottingham University.

e-mail: pbitsios@med.uoc.gr, Tel: 0030 2810 394610, Fax: 0030 2810 394617

Biological psychiatry; clinical psychopharmacology; interdisciplinary and systemic approach of human behaviour; multilevel systems therapy and intervention in individuals and families.

17.5.8 Radiology

Medical Imaging

- Gourtsoyannis, Nikolaos, Professor, Head, Ph.D. 1977, University of Athens.
- e-mail: gournick@med.uoc.gr, Tel: 0030 2810 394684, Fax: 0030 2810 542095
- Chatzidakis, Adam, Assist. Professor, Ph.D. 1993, University of Cologne.

e-mail: chatzidaa@med.uoc.gr, Tel: 0030 2810 392534/42, Fax: 0030 2810 542095

 Karabekios, Spyridon, Assist. Professor, Ph.D. 1989, University of Athens.

e-mail: karampek@med.uoc.gr, Tel: 0030 2810 392539/42, Fax: 0030 2810 542095

• Yiarmenitis, Spyros, Assist. Professor, Ph.D. 1996, University of Patras.

e-mail: giarmens@med.uoc.gr, Tel: 0030 2810 392561/42, Fax: 0030 2810 542095

 Papakonstantinou, Olympia, Lecturer, Ph.D. 1997, University of Athens.

e-mail: olypapak@hotmail.com, Tel: 0030 2810 392539/42, Fax: 0030 2810 542095

 Raisaki, Maria, Lecturer, Ph.D. 2000, University of Crete.

e-mail: mariarai@her.forthnet.gr, raisakim@med.uoc.gr, Tel: 0030 2810 392539/42. Fax: 0030 2810 542095

 Tsetis, Dimitrios, Lecturer, Ph.D. 1998, University of Crete.

e-mail: tsetis@med.uoc.gr, Tel: 0030 2810 392542, Fax: 0030 2810 542095

Inflammatory and neoplastic diseases of the small bowel; pancreatobiliary imaging and intervention; abdominal Magnetic Resonance Imaging; central nervous system infections; interstitial pulmonary disease; focal liver lesions and diffuse liver diseases; renal parenchymal diseases; contrast enhanced ultrasonography of the liver and the kidneys.

Medical Physics

• Gourtsoyiannis, Nikolaos, Professor, Head, Ph.D. 1977, University of Athens.

e-mail: gournick@med.uoc.gr, Tel: 0030 2810 394684, Fax: 0030 2810 542095

• Damilakis, Ioannis, Assist. Professor, Ph.D. 1992, University of Crete.

e-mail: dami@med.uoc.gr, Tel: 0030 2810 394675, 394686, Fax: 0030 2810 542095

 Perysinakis, Konstantinos, Lecturer, Ph.D. 1998, University of Crete.

e-mail: peri@med.uoc.gr, Tel: 0030 2810 392542, Fax: 0030 2810 542095

Estimation of fetal absorbed dose from radiographic, fluoroscopic and tomographic examinations; non-invasive methods for the determination of bone mineral content; 3D imaging.

Nuclear Medicine

Karkavitsas, Nikolaos, Assoc. Professor, Head, Ph.D.
 1983, University of Goetingen.

e-mail: karkavit@med.uoc.gr, Tel: 0030 2810 394676/7, Fax: 0030 2810 542095

Scintigraphy with "Tc"-HICT for the diagnosis of rheumatoid arthritis; somatostatin receptor imaging using octreo scan; Ga-citrate in the diagnosis of sarcoidosis.

Radiotherapy

 Gourtsoyiannis, Nikolaos, Professor, Head, Ph.D. 1977, University of Athens.

e-mail: gournick@med.uoc.gr, Tel: 0030 2810 394684, Fax: 0030 2810 542095

 Varveris, Charalambos, Assist. Professor, Ph.D. 1987, University of Athens.

e-mail: varveris@med.uoc.gr, Tel: 0030 2810 392499, Fax: 0030 2810 542095

Concurrent chemo-radiotherapy as radical or adjurant treatment for carcinomas of GI tract (esophagus/stomach/rectum), GU system (uterine) (cervix/endometrium/bladder/prostate); lung (NSCLC/SCLC), head, neck, sarcomas, gliomas; gene therapy combined with radiotherapy for carcinoma of the prostate.

17.5.9 Social Medicine

Biostatistics

Vlachonikolis, Ioannis, Assoc. Professor, Head, Ph.D.
 1980, University of Oxford.

e-mail: biostats@med.uoc.gr, Tel: 0030 2810 394613/23/37, Fax: 0030 2810 394606

Multivariate analysis of continuous and discrete data; large-scale epidemiological and clinical studies of the Cretan population; establishment of cancer registry in Crete.

Health Planning

Philalithis, Tassos, Assoc. Professor, Head, Ph.D. 1978,

University of Athens.

e-mail: tassos@med.uoc.gr, Tel: 0030 2810 394608, Fax: 0030 2810 394606

Health services research; health needs and outcome assessment; organisation, planning and evaluation of health care systems.

Preventive Medicine and Nutrition

• Kafatos, Antonios, Professor, Head, Ph.D. 1972, University of Athens.

e-mail: kafatos@med.uoc.gr, Tel: 0030 2810 394595, Fax: 0030 2810 394606

 Tzanakis, Nikolaos. Assist. Professor, Ph.D. 1988, University of Thessaloniki.

e-mail: tzanakis@med.uoc.gr, Tel: 0030 2810 392224, Fax: 0030 2810 394606

Nutrition and hyperlipidemias; nutrition intervention in chronic and acute diseases; epidemiology respiratory diseases.

Social and Family Medicine

 Lionis, Christos, Assoc. Professor, Ph.D. 1991, University of Crete.

e-mail: lionis@med.uoc.gr, Tel: 0030 2810 394621, Fax: 0030 2810 394606

Primary health-care, family medicine and general practice.

17.5.10 Surgery

Anaesthesiology

• Askitopoulou, Eleni, Professor, Head, Ph.D. 1978, University of Athens.

e-mail: askitop@med.uoc.gr, Tel: 0030 2810 394733, Fax: 0030 2810 542059

Safety and quality of anaesthesia; postoperative hypoxemia and cognitive dysfunction; effects of anaesthetic drugs on

HRV and QT interval; postoperative nausea and vomiting; pre-hospital emergency medicine.

General Surgery

• Xynos, Evangelos, Assoc. Professor, Head, Ph.D. 1988, University of Athens.

e-mail: exynos@med.uoc.gr, Tel: 0030 2810 392677, Fax: 0030 2810 542059

 Chalkiadakis, Georgios, Assoc. Professor of Thoracic Surgery, Ph.D. 1983, University of Athens.

e-mail: chalk@med.uoc.gr, Tel: 0030 2810 392380, Fax: 0030 2810 542059

 Zoras, Odysseas, Assoc. Professor, Ph.D. 1988, University of Athens.

e-mail: ozoras@med.uoc.gr, Tel: 0030 2810 392392, Fax: 0030 2810 542059

 Chrysos, Emmanouel, Assist. Professor, Ph.D. 1994, University of Crete.

e-mail: chrysos@med.uoc.gr, Tel: 0030 2810 392676, Fax: 0030 2810 542059

Gastrointestinal motility; advanced laparoscopic surgery; cryoablation for liver neoplasias (primary-metastatic); European project for Diagnosis and Neuronal Analysis for skin cancer – DANAOS.

Intensive Care

 Georgopoulos, Dimitrios, Professor, Head, Ph.D. 1988, University of Thessaloniki.

e-mail: georgop@med.uoc.gr, Tel: 0030 2810 392636, Fax: 0030 2810 542059

Mechanical ventilation in patients with ARDS; mechanical ventilation in patients with obstructive lung disease; control of breathing; bronchodilator therapy in mechanically ventilated patients; non-invasive mechanical ventilation.

Orthopedics and Traumatology

• Chadjipavlou, Alexandros, Professor, Head, Ph.D. 1978, University of Athens.

e-mail: ahadjipa@med.uoc.gr, Tel: 0030 2810 392372, Fax: 0030 2810 542059

• Stergiopoulos, Konstantinos, Assoc. Professor, Ph.D. 1983, University of Athens.

e-mail: stergiop@med.uoc.gr, Tel: 0030 2810 394732, Fax: 0030 2810 542059

 Katonis, Pavlos, Assist. Professor, Ph.D. 1996, University of Crete.

e-mail: katonis@med.uoc.gr, Tel: 0030 2810 392374, Fax: 0030 2810 542059

Osteoporotic fractures; degenerative arthritis; biomechanisms; open fractures, scoliosis.

Pediatric Surgery

Charissis, Georgios, Assoc. Professor, Head, Ph.D.
 1975. Freie Universitaet. Berlin.

e-mail: charissi@med.uoc.gr, Tel: 0030 2810 392369, Fax: 0030 2810 542059

Pediatric endocrinology; perinatal surgery; computer systems in health sciences.

Surgical Oncology

 Tsiftsis, Dimitrios, Professor, Head, Ph.D. 1976, 1983, University of Athens.

e-mail: tsiftsis@med.uoc.gr, Tel: 0030 2810 392675, Fax: 0030 2810 542059

 Melissas, Ioannis, Assoc. Professor, Ph.D. 1976, University of Athens.

e-mail: melissas@med.uoc.gr, Tel: 0030 2810 392387, Fax : 0030 2810 542059

 Sanidas, Elias, Assist. Professor, Ph.D. 1992, University of Crete. e-mail: esanidas@med.uoc.gr, Tel: 0030 2810 392675, Fax: 0030 2810 542059

 Romanos, Ioannis, Lecturer, Ph.D. 1988, University of Athens.

e-mail: romanos@med.uoc.gr, Tel: 0030 2810 392675, Fax: 0030 2810 542059

Breast cancer; regional chemotherapy; melanoma and soft tissue sarcoma; plastic surgery; medical informatics in clinical surgery.

Urology

Delakas, Dimitrios, Assoc. Professor, Head, Ph.D.
 1989, University of Athens.

e-mail: delakas@mail.gr, Tel: 0030 2810 392769, Fax: 0030 2810 542059

 Anezinis, Plutarchos, Assist. Professor, Ph.D. 1989, University of Athens.

e-mail: anezinis@med.uoc.gr, Tel: 0030 2810 394734, Fax: 0030 2810 542059

Prostatic cancer; endourology; nephrolithiasis; molecular biology of azoospermia.

Vascular and Cardiothoracic Surgery

- Katsamouris, Asterios, Professor of Vascular Surgery, Head, Ph.D. 1981, University of Thessaloniki. e-mail: asterios@med.uoc.gr, Tel: 0030 2810 392389, Fax: 0030 2810 542059
- Chasoulas, Ioannis, Assoc. Professor of Cardiac Surgery, Ph.D. 1990, University of Athens.

e-mail: hasoulas@tesla.spark.met.gr, Tel: 0030 2810 394730. Fax: 0030 2810 542059

Assessment of subclinical atherosclerotic disease; haemodynamic evaluation of venus diseases; optic fibre for laser angioplasty in angiographic catheters; detection of lung and pleura tumours by laser emission tomography.

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Specialized Teaching Staff for the Faculty of Medicine

- Divini, Kiki, B.A. 1983, University of Athens. Research interests: English for Medicine. e-mail: kdivini@med.uoc.gr, Tel: 0030 2810 394773
- Ladopoulou, Vera, B.A. University of Thessaloniki, M.A.
 1975 in English Literature, University of Toronto.
 Research interests: English for Medicine.
 e-mail: veralad@med.uoc.gr, Tel: 0030 2810 394772
- Ventura, Natalie, B.A. Columbia University, M.A. 1967 in Education, Columbia University.

Research interests: English for Medicine, Poetry for Medicine. e-mail: nventura@med.uoc.gr, Tel: 0030 2810 394772

17.6 THE UNIVERSITY HOSPITAL

17.6.1 Milestones in the Development of the University Hospital

- 1983 Founding Law of the University of Crete
- 1985 Beginning of the construction of the Hospital
- 1989 Inauguration of the University Hospital
- 2001 Placed under the District Health Authority

The University Hospital provides the setting in which the clinical activities of the Faculty of Medicine take place. It was built by the Ministry of Health and Welfare on land that belongs to the University of Crete and was inaugurated in October 1989. It is located just across from the complex of the Faculty of Medicine and the Departments of Physics and Biology buildings, about 7 km from the centre of Heraklio.

The University Hospital of Crete is closely connected to the Faculty of Medicine where the university clinics and the laboratories operate. It provides primary, secondary and tertiary specialized care in the following special units:

both adult and pediatric Intensive Care Units, Coronary Care Unit, MRI, Regional Chemotherapy, Bone Marrow Transplantation, Haemodynamics and Sleep Disorders Laboratory.

The Hospital has two major aims: first, to provide the highest level of clinical training and education to the medical students of the University of Crete, and second, to provide outstanding secondary and - mainly - tertiary specialized health care to the people of Crete and the southern Aegean islands. Already the need to transfer severely ill patients from the district to Athens, which was a common occurrence in the past, has been minimized drastically, except for very specific cases.

In addition, the Hospital trains nursing students and other medical specialists. It is certified to provide full clinical and laboratory training in all medical specialties. Physicians from all over Crete attend the programmes of Continuing Medical Education. Serious basic research is also carried out in the hospital. It must be noted that many research projects are carried out in collaboration with well-known academic and medical institutions from North America and Europe, thus enriching education and research activities of the Hospital.

The University Hospital of Heraklio has four administrative Departments: Medical, Nursing, Administrative and Technical. The Medical Department is divided into 7 sectors: Internal Medicine, Pediatric, Surgery A and B, Laboratory Medicine, Medical Imaging and Social Medicine.

The University Hospital is one of the five largest of the country, with a capacity of 708 beds in full expansion. Its budget for the current year is nearly 45 million euros. It has shown a remarkable and sustained development of all indicators of utilization during the past 13 years of its operation. The number of patients admitted for care as well as the number of those examined in the outpatients'

department and the ER rose significantly from 1990 until 2002. More than 43,000 patients were examined in the outpatients' department and 79,524 in the ER. Data from the National Statistics Service indicate that the number of patients going to hospitals in Athens (outflow) has decreased from 10% in the 1980s (about 8000 cases) to 1.8% in 1997 (about 1200 cases). In addition the number of patients from other regions of the country choosing the University Hospital of Crete for their treatment has increased dramatically.

The medical staff of the University Hospital consists of 97 academic members appointed by the Faculty of Medicine, 158 physicians appointed by the National Health System, 198 residents, 24 members of the Medical Service, 898 members of the nursing staff. Also, 101 technical staff and 501 members of the administrative staff, including other health professionals, work in the Hospital.

The highly dedicated and well-trained personnel, in conjunction with the state-of-the art biomedical technology (e.g., magnetic resonance imaging, MRI, lithotripter) contribute to the provision of highly specialized clinical care, advanced research activities and high standards of education for undergraduate students and graduate staff.

17.7 MEDICAL STUDENTS AND THEIR ACTIVITIES

In 1984, the first students of Medicine were admitted to the Medical Faculty of the University of Crete. Every year, 80 students are admitted following successful performance on nation-wide general examinations. An additional 15% of that number is enrolled through transfers from other Medical Schools, usually from abroad. Thus, the average class size ranges between 90-95 students. These classes favour direct interaction between students and faculty and also permit direct involvement of students in current basic science and clinical projects.

The total number of students that have been enrolled in the Faculty of Medicine of the University of Crete since its inception is 1536, while the current number of students enrolled is 569. In July 1990, the first 33 students graduated to join the ranks of young doctors. The total number of students who have graduated so far is 798.

17.7.1 "G. Papanikolaou" Association of Faculty of Medicine Students

In 1985, students founded the "Georgios Papanikolaou" society, the head of which is a 9-member board elected on an annual basis. Its activities include all issues involving students, academic or otherwise. It organizes various meetings, either regular (students' welcoming, for example) or special ones. These meetings often include the artistic contribution of its members. Students also participate in activities run by the University (for example Inter University athletic meeting, 2002) and in University Championships, in basketball and football.

17.7.2 HELMSIC

The students also actively participate in the National Hellenic Scientific Medical Student Association and the International Federation of Medical Student Associations (I.F.M.S.A.). The students have played a major and catalytic role in the Hellenic Medical Students' International Committee (Hel.M.S.I.C.), which was founded in the early 1950s and is a non-profit, non-political, non-governmental student organization. It has been a full member of I.F.M.S.A. since 1958. I.F.M.S.A. is recognized by the W.H.O. as the official international forum for international medical students. Hel.M.S.I.C. holds a number of activities in the field of exchange programmes (clinical and research), public health, medical education, reproductive health and refugees and peace affairs.

The Hel.M.S.I.C. office of the University of Crete is the Greek administrative centre in matters of exchange programmes and medical education. Finally, it created and hosts the I.F.M.S.A. web and mail servers (www.ifmsa.org).

17.7.3 EEFIE, Scientific Society of Medical Students

EEFIE was founded in September 1993. Its main aim is the involvement of students of Medicine, Dentistry and Pharmacology with social and educational issues and the production of scientific and social work. It also helps in the editing of books, guides and a magazine, the creation of electronic information services on the Internet and the organisation of scientific, humanitarian and cultural activities. Its action involves mainly the publication of the "In Vivo Medicine" magazine, which includes general topics addressed to students of Medicine and young doctors. It organises lectures, meetings, educational seminars and volunteer programme.

EEFIE organises regular national meetings (e.g., Ioannina 2002; Athens 2003).





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