# PROSPECTUS



ACADEMIC YEAR 2007-2008

#### Rector

#### **Professor Ioannis Pallikaris**

Vice Rector for Academic Affairs and Personnel Professor Joseph Papamatheakis

Vice Rector for Financial Planning and Development
Professor Emmanuel Petrakis

Vice Rector for Infrastructure and Student Affairs
Associate Professor Theofanis Kitsopoulos

Dean of Faculty of Philosophy
Associate Professor Alexis Kalokairinos

Dean of Faculty of Education Professor Panagiotis Michaelides

Dean of Faculty of Social Sciences Professor Athanasios Papadopoulos

Dean of Faculty of Sciences and Engineering Professor Susanna Papadopoulou

Acting Dean of Faculty of Medicine Associate Professor Odysseas - Ioannis Zoras A warm welcome to the University of Crete.



The University is proud of its reputation as a modern academic institution committed to excellence in teaching and research. It was established in 1973 and accepted its first students in 1977. Today more than 11,000 undergraduate and 2,000 postgraduate students study at the University, which employs more than 700 members of academic staff.

The University is based on campuses in Rethymnon and Heraklion. At Crete we believe that our main priorities - teaching excellence, distinguished research and scholarship - can only be achieved in a context that values intense human and cultural interaction. Offering courses and supervision in a great number of disciplines, from medicine, biology, physics and mathematics to education, economics, politics, history, and classics, to name but a few, Crete is one of Greece's most dynamic and outward-looking academic institutions. It is also an institution that takes very seriously its pedagogical role in the widest sense. Embracing and aiming to cultivate further the rich intellectual and culturaltraditions of the island of Crete and of Mediterranean Europe, the University plays an active role in the social and economic life of the region.

I hope that this Prospectus gives you the information you need and that your link with the University, whether fleeting or long term, is fruitful.

Professor Ioannis Pallikaris Rector





#### **CITIZEN - SCIENTIST**

The University of Crete lays particular emphasis on the education of scientists who are socially responsible citizens and aware of the crucial role they, as professionals, will come to play in it.

The interdisciplinary course "Citizen-Scientist" is based on an idea of the University as an institution which not only produces and transmits specialized knowledge, but also fundamentally promotes critical thinking and undogmatic judgement. It views it as its mission to educate reflexive citizens, who can think autonomously through the disciplines they learn. This is the best way of encouraging social development and human well being, in the short and long run. To such a goal the University of Crete is unconditionally committed.

During the Fall Semester 2007- 2008, its course content is devoted to "Professional Ethics". Its objective is the understanding of the theoretical basis and practical implications of the moral challenges that arise in the work-place, in relation to the idea of science as a profession.

Specific areas of study cover the analysis of the moral dimensions of professional practice and the justification of relevant criteria of moral reasoning, as well as specific issues such as the individual and social responsibility of scientists, e.g. regarding the use of their work by third parties, intellectual property rights, safety issues vs. privacy rights in the work-place, the problem of deceit in professional scientific practice (e.g. data fabrication, corruption, etc.), ethical issues in the laboratory and in scientific publication, professional ethics in the public sector but also the role of corporations (corporate social responsibility), moral aspects of educational practice, the moral and political limits of a rapidly converging world economy, moral issues and normative dilemmas regarding economic growth and the environment, economy and the ecological threats against the planet.

The course is elective (3 credit units), offered each semester to all undergraduates. It also hosts lectures which can be attended by the public, thereby contributing to the establishment of a steady educational link between the University and its hosting city.

The Rector of the University of Crete
Professor Ioannis Pallikaris

# This prospectus was prepared under the supervision of the General Directorate of Administrative and Financial Services of the University of Crete.

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PRINTING EPTALOFOS ABEE

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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 13,085 students (11,414 at the undergraduate level and 1,671 at the postgraduate level) and 704 teaching and research staff members (537 permanent and 167 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 is based on 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, 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, Chemistry, 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.

#### 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 representative from the administrative employees and 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: Academic Affairs and Personnel, Development and Financial Affairs, Infrastructure, whose duties are determined by the Senate.

## Rector Professor Ioannis Pallikaris

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Vice Rector for Financial Planning and Development Professor Emmanuel Petrakis Tel: (0030) 28310 77900 or 2810 393315 Fax: (0030) 28310 77909 or 2810 393212 e-mail: petrakis@rector.uoc.gr Vice Rector for Academic Affairs and Personnel

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Vice Rector for Infrastructure and Student Affairs Assoc. Professor Theofanis Kitsopoulos Tel: (0030) 28310 77900 or 2810 393315 Fax: (0030) 28310 77909 or 2810 393212 e-mail: kitsopoulos@rector.uoc.gr

#### **Administrative Services**

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

Head of General Directorate Dr Stella Papadaki-Tzedaki Tel: 0030 28310 77946 Fax: 0030 28310 77955 e-mail: papadaki@admin.uoc.gr General Directorate of Administrative and Financial Services

Subject of the General Directorate is:

- I. The promotion of the procedure and the modernisation of the Administrative and Financial Services of the University of Crete, in the frame of the goals and decisions of the bodies of the University's Administration.
- 2. The planning of their activities.
- 3. The coordination of their action aiming at the more methodical and more effective realisation of their work. These services are:

Head of the Directorate Irini Mala-Golegou Tel: 0030 28310 77922

Head of the Subdirectorare (Heraklio)
Petros Larentzakis
Tel: 0030 2810 393181

I. Administrative Services Directorate

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 well as administrative support services.

Head of the Directorate Andreas Tsichlakis Tel: 0030 28310 77934 e-mail: tsixlakis@ admin.uoc.gr

Head of the Subdirectorare (Heraklio) Catharine Manassaki-Vogiatzaki Tel: 0030 2810 393150 e-mail: kmanasak@admin.uoc.gr II. Financial Management Directorate

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 property.

Head of the Directorate Evangelia Vidaki Tel: 0030 28310 77938 e-mail: bidaki@admin.uoc.gr III. Education and Research Directorate

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

Head of the Directorate Nikos Mastorakis Tel: 0030 2810 393180 e-mail: mastorak@admin.uoc.gr IV. International and Public Relations Directorate

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

Head of the Directorate Christos Pantazis Tel: 0030 28310 77967

V. Directorate of Publication and Printing

The role of this Directorate is the promotion of the processes for the syntax, publication, cost accounting and distribution of the didactic books, the scientific publications and the publications of the administration.

Head of the Directorate Ioannis Tzikas Tel: 0030 28310 77906 VI. Directorate of Planning and Organizing

The role of this Directorate is the planning and the concern for the organization of all services of the University.

Head of the General Directorate Constantinos Stratakis Tel: 0030 28310 77716

e-mail: stratakis@admin.uoc.gr

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

Head of the Directorate Constantinos Stratakis Tel: 0030 28310 77716

e-mail: stratakis@admin.uoc.gr

Head of the Subdirectorare (Heraklio) Panaviotis Vlassis Tel: 0030 2810 394190 Technical Works Directorate

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 maintenance of University building facilities and their components; as well as the development of the University grounds.

Head of the Directorate Fleni Diamantaki Tel: 0030 28310 77802 e-mail: diamant@libr.uoc.gr

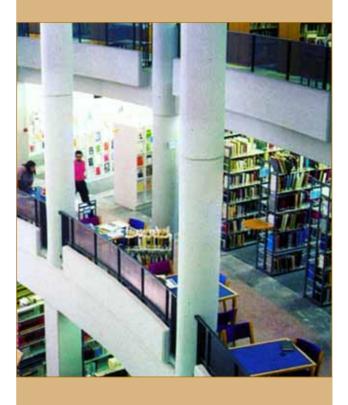
Library Directorate

Information regarding the services of the Library Directorate is presented in detail in the Services section below.









#### SERVICES

#### THE UNIVERSITY LIBRARY

The University of Crete Library was established in 1977. 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, which is expected to be transferred in Voutes. Computer Science and Applied Mathematics, while at Voutes there is one branch serving the Faculty of Medicine and another for the Departments of Physics, Chemistry, Biology, and Materials Science and Technology.

All active members of the academic community of the University of Crete - undergraduate and postgraduate students, faculty members, administrative staff - as well as the pensioner ones 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 main objective of the Library is the development of its collections, so that it can meet the educational requirements of the members of the academic community. In addition to rich traditional collections of printed material, digital and electronic sources of information supplement and impove substantially the Library's efficiency.

The Library of the University of Crete is fully automated by an Integrated Library System. Its bibliographic catalogue is one of the lagest and most valid ones in Greece and is accessible through the Library web page. In the Knossos Department, a special computer service has been installed for users with kinetic and eyesight problems, to enable the latter ones to have access to the Library's electronic facilities. The Library has also developed a search portal that functions as a virtual collective catalogue of all Greek Academic Libraries (http:zephyr.lib.uoc.gr).

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 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, Knossos and Voutes 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. The Reference Department conducts seminars related to Library Services and Resources, the bibliographic catalog etc. Attendance to the Library orientation course is mandatory for all users in order to obtain a Library card.

**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 the Greek serials union catalogue.

**Electronic Journals** - The Library holds a significant - and rapidly growing - collection of electronic journals. Thousands of titles are put at the disposal of the local university community, resulting either from bilaterial agreements contracted with the institute or from collective ones, within the scope of the Greek Academic Libraries Network (Heal-Link).

**Databases** - In addition to the e-journals the Library provides access to specialized and multi-disciplinary databases.

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 University of Crete Library is the first among the Greek Academic libraries to create a collection in digital format consisting primarily of the theses and dissertations written by the students of the University of Crete, along with technical reports and journals published within the University of Crete academic community, and a few digitized gravures. The access to the digital library is free through the library web pages (http://dlib.libr.uoc.gr/).

The Library also offers Anemi, a rich collection of digitized material related to Modern Greek Studies which provides access to more than 1.000.000 digitized pages.

**The European Documentation Centre** - The Centre was established in July 1999 by a joint decision of the University of Crete and the European Commission and operates as a department of the University Library in Rethymno. It cooperates 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.lib.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. Accessing the Library's webpages, the user can submit a request for interlibrary loan electronicly or contact 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 - 20:00, Saturday: 09:00 - 15:00

Faculty of Sciences and Engineering Branch (Knossos) Tel: 0030 2810 393230, Fax: 0030 2810 393234

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

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

Hours: Library (3rd floor) Monday - Friday: 08:00 - 16:00

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 Department of International Relations and European Programmes (in Rethymno) and the Department of International and Public Relations (in 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, J. Monnet, Med-Campus, TMR, Leonardo da Vinci, and the LLP/Erasmus programme (European Union action programme, in collaboration with Universities).

The Department employees in both Rethymno and Heraklio work primarily on the LLP programme, which deals with the cooperation of the University of Crete, through its academic departments, with Universities in the 27 European Union member States, as well as the countries of Norway, Iceland, Liechtenstein and Turkey. Specific activities include providing information and assistance to University of Crete wishing to go to another University under a LLP grant (outgoing), and to faculty members, administrative personell and students of other Universities who visit the University of Crete under a LLP 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:mastorak@admin.uoc.gr, alefandinou@admin.uoc.gr

#### Heraklio

Tel: 0030 2810 393180, Fax: 0030 2810 210073 e-mail: mastorak@admin.uoc.gr



#### **PUBLIC RELATIONS**

The Public Relations Department (PRD) is in close cooperation with the academic Departments in order to support and promote inter- and intra- communication of the University of Crete (UOC).

Activities of PRD:

- Media Management for the dissemination of the state of the Art research accomplished at the UOC, including news on research projects and update releases.
- · Production of special publications and booklets.
- Co-ordination of official institutional ceremonies (eg. graduation ceremonies, commencement ceremonies, honorary degree ceremonies), cultural events (eg. spring and autumn commencement ceremonies, different anniversaries), and participation of our University at national and international exhibitions, conferences, festivals etc.

#### **CAREERS SERVICE**

The Careers Service is a new institution in Greek Universities and is co-funded by the European Union - European Social Fund & National Resources - EPEAEK II. 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 Scientific Director of the Careers Service is Anastasios Xepapadeas, Professor of Economics.

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, career planning and development, and organizes Career Fairs and Postgraduate study / Scholarships presentation days and also conducts surveys on the professional development.

Contact Information:

Faculties of Philosophy, Education and Social Sciences - Rethymno. Tel: 0030 28310 77726/7, Fax: 0030 28310 77728

Faculty of Sciences and Engineering - Heraklio. Tel.: 0030 2810 394010/20, 393370, Fax: 0030 2810 394021

Faculty of Medicine - Heraklio. Tel/Fax: 0030 2810 394754, e-mail: career@admin.uoc.gr Web site: http://career.admin.uoc.gr

#### Supporting Entrepreneurship in the University of Crete

Supporting Entrepreneurship is a service operating within the Careers Service of the University of Crete, with the aim to contribute to the promotion and development of the spirit and practice of entrepreneurship. More precisely, the service encourages self employment and innovative actions and supports students and graduates of the institution so that they can build successful and financially-viable enterprises and improve their entrepreneurial skills. Specialized and experienced consultants offer on a full-time basis, professional advice and guidance, by assisting the students do research on a business idea and draw a realistic business plan. In addition, the service provides mentoring on all the aspects of business organization and management, as well as information about the market and the conditions in the economic environment, the legal steps required to start a new business and the existing funding opportunities. Particularly, the service's web site provides very focused and current information as it is daily updated with articles, announcements and news on several topics such as technology and innovation, entrepreneurship, business summits and competitions.

The project is co-funded by the European Union - European Social Fund & National Resources - EPEAEK II and the Scientific Director is the Professor Ioannis Papamastorakis.

Contact Information:

Heraklio: Tel/Fax: 0030 2810 394021 Rethymno: Tel/Fax: 0030 28310 77728

e-mail: epixeiro@admin.uoc.gr, Web Site: http://epixeiro.admin.uoc.gr/

#### **Work Placement Centre**

The Work Placement Centre is co-funded by the European Union - European Social Fund & National Resources - EPEAEK II and is part of the University of Crete Careers Service, offering to the students a central point of contact for work experience, placement vacancies, information and professional guidance. It supports the students and the departments of the university participating at the work placement programme.

The Work Placement Centre is the fishbone aiming to support all different parties involved with the programme (Students, employers, administration), in order to promote and to achieve the aims set by the Ministry of Education and the European Union.

We have invented on IT by developing an application system, operating over the internet, supporting the administration and providing information on a real time basis to all parties. The concept is based on the advantages the internet provides, minimizing time, geographical distances and bureaucracy.

The system encourages students to apply on-line, employers to post work placement vacancies and most important, improves communication. It operates via the web site address http://praktiki.admin.uoc.gr providing also useful information about the programme, the procedures and the academic departments.

Offices of the Work Placement Centre are allocated within the offices of the Careers Service department on the main site in Rethymnon and Heraklion site.

Scientific Director is the Professor Anastasios Xepapadeas, based on the economics department in Rethymnon.

Contact Information:

Tel/Fax: 0030 28310 77728, E-mail: PPA@admin.uoc.gr, Web Site: http://praktiki.admin.uoc.gr

#### THE SECRETARIAT OF THE RESEARCH COMMITTEE

It deals with the management of all research and development grants and projects of the University. It is supervised by the research Committee that sets research policy and draws up the budget yearly, subject for approval by the Senate. The Secretariat has two branches (one at Heraklion and one in Rethymno) and employs 29 qualified staff.

The Secretariat is dedicated to providing the professional services required to support and encourage the development of funded research and development activities of the University. It:

- monitors, reports, facilitates and administers the grants and contracts in compliance with the granting agencies and the laws governing financial administration
- maintains an active liaison with researchers
- ensures that all internal and external policies, procedures and guidelines affecting research activities are known and maintained by the University Community.
- provides support in the preparation of grant and contract proposals
- recommends to the Committee policies and procedures related to research activities.

(Tel: 0030 28310 77914 in Rethymno and 0030 2810 393155 in Heraklio)

#### COMMUNICATIONS AND NETWORKING CENTRE

Operation of the Center of Communications & Networking (UCnet) is governed by the Institution's Internal Regulation. Headed by the Systems and Networking Senate Committee, which supervises its work, UCnet is responsible for operating, expanding and advancing the unified communications network of the University of Crete. UCnet's aim is the non-stop provision of high quality network services to the staff and students of the University of Crete.

In addition, through continuous participation in a multitude of diverse and innovative IT development projects, mainly funded by the EU structural funds, UCnet assists in establishing and maintaining sound bonds between the University and the local communities. In such a way, UCnet also preserves a high level of expertise in several IT related areas making it an important pole of sustainable growth for the University.

Facilities and services provided by UCnet to the University staff and students include:

- Administration and development of the University's Core Network equipment and infrastructure, providing for high speed and high availability connections between the University points of presence and the Internet.
- Administration and development of the University's Distribution and Access Network equipment and infrastructure, providing end users with wired, wireless or remote [dial-up / VPN] access to internal and external data networks.
- Administration and development of the University's Unified telephony network which consists of several private branch exchanges [PBXs] and the appropriate IP Telephony infrastructure.
- Operation of an e-learning platform (http://elearn.uoc.gr).
- Support of synchronous e-learning activities by utilising appropriately designed and equipped classes.
- Operation of multi-user conference infrastructure [MCU] providing multiple point videoconferences.
- Booking management and operation of e-learning classes.
- Directory service, with the capability of searching information for the university personnel, connected to corresponding services of other academic Institutions. The service is also used for user authentication for other network services.
- e-desktop services for the end user (personnel of the Institution) which include e-mail, agenda, calendar, and are accessible at http://mail.uoc.gr.
- News/Informational portal (http://www.ucnet.uoc.gr).
- End user support focused on the prompt and reliable solution of his/her problems.
   This is assisted by a helpdesk environment which facilitates the contact with the UCnet personnel (http://helpdesk.ucnet.uoc.gr).

By implementing several quality control mechanisms UCnet manages to sustain a high level of quality for the already provided, and a high rate of deployment of leading edge services. This is also aided by the continuous evaluation of the feedback collected from the academic community.

The student can be informed for the services that are provided at the Fourth chapter, Section B.

Heraklio: Tel: 0030 2810-393317, Fax: 0030 2810-393318, e-mail: ucnet@uoc.gr

Voutes: Tel: 0030 2810-394848

Rethymnon: Tel: 0030 28310-77044, Fax: 0030 28310-77040

#### 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 77050

#### **STUDENT CENTER**

The Student Center of University of Crete is situated in the University Campus of Voutes in the city of Heraklion. It was established in 2002 and begun its operation during the academic year 2002-2003. Its main purpose is to provide a suitable place for the promotion and encouragement of the student's academic, social and cultural activities and to serve as a link with the cultural and educational events of the city of Heraklion.

The building of Student Center is a large, modern one that houses the offices and studios of the students' cultural and artistic teams, the Social Welfare Department and the Students Counselling Center.

It also includes:

- a conference theater place of 180 seats with can accommodate artistic performances, cultural events as well as conferences and congresses.
- · a student university restaurant

- · a multiple purpose room with a capacity for 60 individuals and
- a VIP restaurant for formal events for 150 persons.

The students' cultural and artistic teams of the University of Crete in Heraklion are the following:

- I. Painting Group
- 2. University of Crete Theatre Group
- 3. Cinema Group
- 4. Literary Group
- 5. Music Team
- 6. Team of Student Voluntary Blood Donation of University of Crete
- 7. University of Crete Student's Astronomy Club
- 8. University of Crete Radio
- 9. Choir "Fragiskos Leontaritis" of the University of Crete
- 10. Dance Group
- 11. Photography Group

Furthermore the following clubs exist (in untypical form):

AEGEE - Antena Heraklion (Association des Etats Generaux des Etutiands Europeans)

Heraklion Students Wireless Network

Humaine Society (animals' shelter) and

Motor Club

For more information please contact:

Student Center

Tel: 0030 2810-394883, Fax: 0030 2810-394884

E-mail: antonia@edu.uoc.gr , Website: http://www.uoc.gr/studentcenter/

#### **DIGITAL MEDIA CENTRE**

The University of Crete Digital Media Centre is a co-ordinated, central University of Crete utility aimed at serving and promoting academic, cultural and social activities at the University via new, high technology digital printing facilities.

The Centre operates under regulations approved by the University of Crete Senate (Decision No. 206/16-12-2004) and is superintended by the University of Crete Committee for the Application of Digital Education Technology.

#### a) Staffing - Facilities

The Digital Media Centre is staffed by a comprehensive team of experienced specialists in graphic arts and software development.

In achieving its aims, the Centre makes use of cutting edge facilities for modern print design and production, in addition to software involved in developing multimedia applications.

The centre also has a comprehensive digital press linked to software and systems in the creative department, thus guaranteeing safe and effective data transfer, high productivity rates and excellent print quality.

#### b) Services

The centre makes use of digital print technology to produce printed matter of any kind relating to education, culture and the diffusion of science. In particular, the centre undertakes jobs involving:

Reproduction of educational material (notes, exercises, course exams, departmental study guides, doctoral theses and printing for student societies.

**Assorted print jobs** - The Digital Media Centre's brief includes the production of all types of printed matter for the university community. This may relate to promotion and publicity or the holding of events and conferences rather than teaching itself (stationery and notepaper, envelopes, student record cards, invitations and cards of various kinds, posters, information leaflets, brochures, university newspapers and periodicals, banners etc). The centre also offers a design and editing service for printed matter.

**Printing and registering of conference proceedings** - The Centre can print conference proceedings and obtain ISBN codes for University of Crete publications. In providing support for conferences, the centre offers a comprehensive conference support package, and can produce all print and electronic media for every stage involved in organizing and holding conferences, as well as publicizing results, regardless of participant numbers and geographical location.

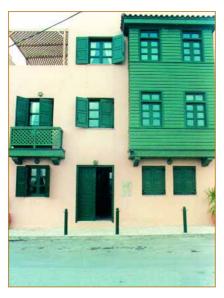
**Multimedia Applications** - Working in conjunction with the University of Crete Multimedia Lab, the Centre's activities also extend to the production of supplementary educational material in the form of CD-ROMs, web sites and electronic learning aids.

The Centre accepts jobs involving the design, programming, scripting, digitization, artwork and production of complete multimedia projects. These are priced according to type and complexity.

Contact: Tel: 0030 2810 393381/384, Fax: 0030 2810 393382

e-mail: emedia@mmlab.uoc.gr, URL: www.uoc.gr/emedia

#### **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





The NHMC is under the Faculty of Sciences and Engineering and is divided into five sections related to: Zoology, Botany, Anthropology, Paleontology and Geology and Minerals. Each section consists of skilled, specialized scientists and technical staff.

Library, Photography and cinematography archives, Graphics and G.I.S., Laboratory of Molecular



systematics and evolution, Laboratory of Taxidermy are some of the adjusted departments of the NHMC.

NHMC plays a vital role in researching on the Mediterranean natural environment and increasing the public awareness of environmental issues.

#### The NHMC:

- Contributes to the development of basic and applied research on the protection and the conservation of the natural environment, the biodiversity, and the endemic or rare species.
- Keeps scientific collections in order to achieve conservation of genetic biodiversity.
- Contributes to the education of undergraduate and postgraduate, Greek and foreign students.
  - Contributes to the improvement of primary and secondary environmental education.
- Aims to help people develop their scientific knowledge and be aware of the impact of human activity of the environment. Increases public awareness and intends to involve people in the protection and conservation of the natural environment.

#### **Activities**

- Basic research
- Applied research
- Enrichment of scientific collections and exhibition material
- Environmental education of pupil, students, teachers and general public
- Publications
- Multimedia applications

#### **Exhibition**

Up to 2005 and since 1997, the exhibition of NHMC was housed at the Knossos Ave in Heraklion. Since March 2007 the exhibition of NHMC is located at Sofokli Venizelou

Avenue in Heraklion (west of the port of Heraklion). It covers an area of 5.500 m2 were the visitor is able to see:

- Dioramas (maxi, midi and mini dioramas that present the most important ecosystems of Mediterranean environment)
  - Planetarium
  - Seismic Table that imitates earthquake conditions
  - Mediterranean: Man and Environment
  - Fossils
  - Geological proceedings
  - Discovery center
  - Halls suitable for purposes of environmental education
  - Hall for temporary exhibition

## INSTITUTE OF VISION AND OPTICS (VARDINOYIANNION EYE INSTITUTE OF CRETE)



The "Institute of Vison and Optics" (IVO) is a pioneering institute in research, education and specialized clinical services concerning the field of Visual Sciences.

The institute is composed of three main divisions that share common infrastructure, administrative services and to some extend scientific personnel. The three main divisions are:

- Vardinoyiannion Eye Institute of Crete (VEIC): VEIC started its operations in 1989 in collaboration with the Ophthalmology Clinic of the University Hospital of Crete. The institute is at the forefront of developments in the field of Ophthalmology. The clinical activities of the institute include refractive surgery, photodynamic therapy, and clinical electro-physiology. VEIC is internationally recognized as the birthplace of "LASIK" the technique for the correction of refractive errors, which is currently the most common operation on the human body.

- International Ophthalmology Center (IOTC): IOTC offers specialized education and training in the field of Visual Optics. An example of IOTC's activities is its contribution to the interdisciplinary postgraduate (MSc) course entitled "Vision and Optics" which is

organized in collaboration with the Department of Physics and Mathematics, and the foundation of Research and Technology Hellas (FORTH) (www.optics-vision.gr).

Moreover, the "Mini Fellowships in Refractive Surgery" and the year-long fellowships in Refractive Surgery are intended for Ophthalmologists interested to the subspecialty of Refractive Surgery. The Aegean Cornea and the Aegean Retina Meetings are biannual specialized meetings, where all recent developments and arising issues in Ophthalmology are presented and discussed. The Aegean Summer School in Visual Optics is organized annually from IOTC, and covers topics with a wide range of subjects in optics and their implication in vision and perception (www.ivo.gr/SummerSchool).

- The National Sports Vision Center NSVC (NSVC) The NSVC hosts the core of IVO's research activities, as it is the division that develops the human resources and infrastructure in this general direction. NSVC units include the electrophysiology and visual ergonomics lab, the histology lab, the imaging lab, the optical instrumentation lab and a precision machining workshop. NSVC mostly focuses on the physiology of vision; however the high level of the infrastructure and research expertise may contribute to the understanding and treatment of non-trivial pathological conditions.

Information on the internet can be found at www.ivo.gr. Contact Information: Telephone: 0030 2810 371800; Fax: +30 2810 394653; Address: IVO, Vardinoyiannion Eye Institute of Crete - University of Crete, School of Health Sciences 71003 Heraklion - Crete, Greece



#### 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 27,900 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 16<sup>th</sup> and 17<sup>th</sup> 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 133,000 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.



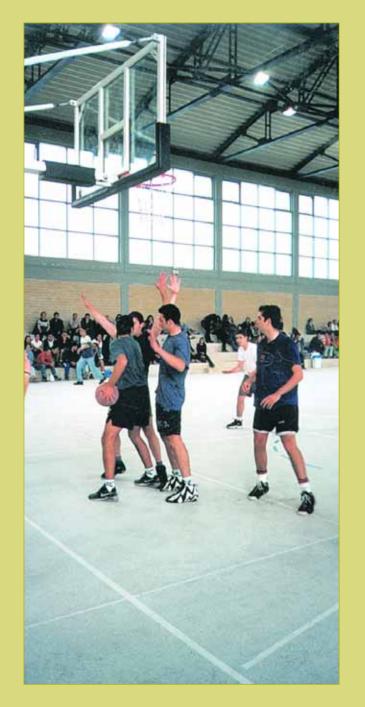
The city is host to cultural activities with a local, European and international dimension and appeal: art exhibitions, theatre, literary events, international conferences, and scientific meetings. In July and August, the Summer Festival takes place at Kazantzakis Theatre, which is situated in the park 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**

At present, the University of Crete in Heraklio provides rooms for alimited number of students, who are entitled by law to free housing, at hotels that have a special agreement with the University. Furthermore, in Rethymno the hotel University offers 60 places in the hotel "Xenia", and 143 places in the University's Halls of Residence in the area of Gallos.

#### 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 Ist and the I5th 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.

Health and Insurance

For EU citizens

Free Medical Service is provided for those who have the European Health Insurance Card.

• For non EU students

University medical insurance can be provided (i.e. free medical services, hospitalisation, dental care, diagnostic tests and medical treatment at public hospitals).

#### **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.

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 Department of International Relations in Rethymno (Tel: 0030 28310 77424) or Heraklio (Tel: 0030 2810 393225).

#### **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.

#### **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.

#### **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.

#### 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. To obtain the permit, students need the following documents:

- 1. Two applications completed by the interested (the documents are especial and are provided by the foreigners office)
- 2. Three colored photographs
- 3. Verified photocopy of a valid passport where appears the attestation of entrance in Greece (verification should be by a lower).
- 4. Certificate of registration acceptance in the University of Crete.
- 5. Information regarding economic matters.
- 6. Health insurance booklet of the University of Crete.
- 7. Health certificate from a Greek Hospital.

A residence permit is required for EU students too, if their stay exceeds a period of three months. 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:

- In Rethymno, by the Foreigners' Office in the town hall of Rethymno, tel: 0030 28310 88277
- In Heraklio, by the Foreigners' Office at Moni Prevelis 2 (opposite Municipality Policy), tel: 0030 2810 245102.

## **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.

## **Cost of Living**

Living expenses are estimated to be about 725 euros per month. More specifically, costs are estimated as follows:

Accommodation 250 euros
Catering (self-catered) 200 euros
Bus fares 25 euros
Other expenses 250 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 20:00 - 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 245598, 288446

## Important Telephone Numbers in Heraklio (area code 2810)

First aid - Emergencies (EKAB): 166

Police emergency: 100 Fire emergency: 199

Hospitals:

- Venizelio: 2810 368000

- University Hospital: 2810 392111

Post Office: 2810 234468 Taxi: 2810 210102, 210124

Heraklio Airport: 2810 397129, 397136

#### **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**

In general, 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 35 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 A.N.E.K. Lines (Piraeus Office Tel: 0030 210 4197430), N.E.L. Lines (Piraeus Office Tel: 0030 210 4115015).

The public bus service (KTEL) provides a link between most cities and villages in Crete. There is one bus station located on Kefalogiannidon Street (Tel: 0030 28310 22212, http://www.bus-servise-crete-ktel.com).

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 337311 and Aegean Airlines – Tel: 0030 2810 330475). 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 4145700) or A.N.E.K. Lines (Piraeus Office Tel: 0030 210 4197430).

The public bus service (KTEL)

provides a link between most cities and villages in Crete (information can be found at http://www.bus-servise-crete-ktel.com). There are two bus stations.

Heraklio Station No. I (at the port, Tel: 0030 2810 245019/20, 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 Office in Heraklio (Tel: 0030 2810 246299, 246106).

## **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				
FACULTIES IN RETHYMNO		FACULTIES IN 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	Department of Sociology	Department of Mathematics  Department of Physics	
Department of History	Education Department	Department of Economics	Department of Computer Science  Department of Biology	Department of
Department of Preschool Education Social Studies	Department of Psychology	Department of Chemistry	Medicine	
	of Preschool	Department of Political Science	Department of 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".

<sup>\*</sup>The date(s) vary according to the Greek Orthodox Calendar.

Students' performance in each course is assessed as follows:

- I. 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**

The departments of the University of Crete 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 Advisors. The role of the Academic Advisors is to inform students about any matters related to their studies, in a manner determined by the Department.

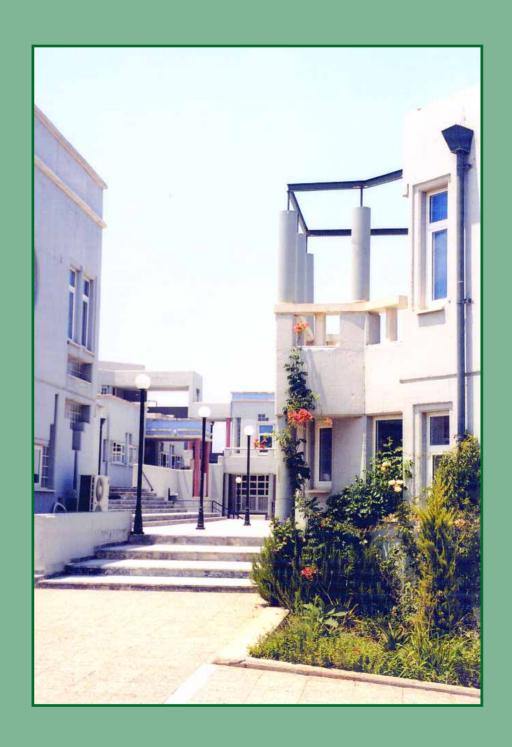




## FACULTY OF PHILOSOPHY

## **DEPARTMENTS:**

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



The Faculty of Philosophy awards three degrees, corresponding to the three departments in the school: a) Philology; b) History and Archaeology; c) Philosophy and Social Studies.

To gain a degree, students must attend and pass examinations in a total of fifty-two (52) semester-long courses, taught by weekly three-hour lectures over eight (8) semesters in total (this number includes four (4) courses in a foreign language). Each weekly teaching hour is equivalent to one teaching unit (t.u.).

Compulsory courses in the Faculty of Philosophy include Foreign Language and Terminology. Students can choose from one of the languages offered (English, French, German, Italian, Turkish or Spanish), in which they are taught academic level bibliography and terminology relating to the subjects they are studying. The Faculty of Philosophy also offers Modern Greek language courses to foreign students attending the University.

#### FOREIGN LANGUAGE TEACHING STAFF

 Aretoulakis, Manolis, M.A. in English and American Literature, University of Illinois.

Research interests: English literature and culture, literary theory.

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- Poulopoulou, Maria, M.A. in Philology, University of Crete.
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- Theodoraki, Despina, Doctorat, in Comparative Literature, University of Paris III Sorbonne Nouvelle. Research interests: French language and literature.

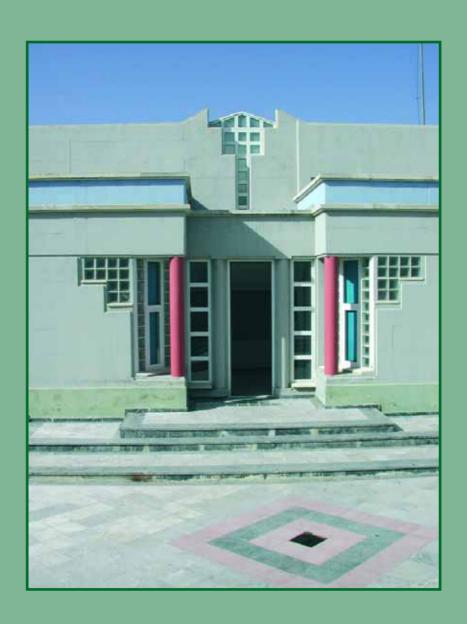
Tel: 0030 28310 77298

## **Dean's Office**

Dean: Assoc. Professor Alexis Kalokairinos
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Dean's Secretariat
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## I. DEPARTMENT OF PHILOLOGY

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Head of the Department: Professor Anastasios Nikolaidis
e-mail: nikolaidis@phl.uoc.gr, Tel: 0030 28310 77302

Departmental Secretariat

Tel: 0030 28310 77300/306, Fax: 0030 28310 77304

Departmental Secretary: Evangelia Kanakaki

### 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: I) 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.

## 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 crosslinguistic perspective. The programme is structured in the following way: (1) 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 Doctoral degree (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** 

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

Research interests: History of Modern Greek drama with emphasis on the 19th and 20th centuries; history of Greek cinema with emphasis on genre, directors and analysis of individual films.

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 Kaklamanis, Stefanos, Doctoral degree, Modern Greek Philology, University of Crete.

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

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 Nikolaidis, Anastasios, Ph.D., Classics, 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, 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, Doctoral degree, Modern Greek Philology, 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.

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#### Associate Professors

 Anagnostopoulou, Elena, Dr., Linguistics, 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.

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• Athanassaki, Lucia, Ph.D., (appointment pending), Classics, Brown University.

Research interests: Greek and Roman lyric poetry; Greek tragedy.

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

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

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 Kalokairinos, Alexis, Doctorat, Linguistics, 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

• Kastrinaki, Angela, Doctoral degree, Modern Greek Philology 1994, University of Thessaloniki.

Research interests: Modern Greek literature of the 19th and

20th centuries; comparative literature. e-mail: kastrinaki@phl.uoc.gr, Tel: 0030 28310 77285

- Katsimali, Georgia, Ph.D., Linguistics, 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, Doctorat, Byzantine Philology, University of Paris I-Pantheon Sorbonne.
   Research interests: Byzantine rhetoric; edition of texts.
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- Vassis, Ioannis, Dr., Byzantine Philology, University of Hamburg.

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

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 Yatromanolaki, Ioanna, Ph.D., Classics, 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.

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## **Assistant Professors**

 Glytzouris, Antonis, Doctoral degree, Theatre Studies, 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

Kappa, Ioanna, Dr., Linguistics, University of Salzburg.
 Research interests: Phonology; optimality theory; first

language acquisition/phonological development; phonology of Greek/Greek dialects; language contact; language change; morphophonology.

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 Panayotakis Stelios, Doctoral degree, Classics, University of Crete.

Research interests: Greek and Latin fiction. Language and literature of Late antiquity.

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#### Lecturers

 Delli, Dimitra, Doctorat, Linguistics, University of Renés Descartes - Paris V.

Research interests: History of the Greek language, Ancient Greek dialectology, Phonology and Morphology of Ancient Greek, Historical and Comparative Linguistics.

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 Detoraki, Marina, Doctorat, Byzantine Philology, University of Paris-Sorbonne (Paris IV).

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

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Kavoulaki, Athina, Ph.D., Classics, University of Oxford.
 Research interests: Greek tragedy; Greek comedy; Greek religion.

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 Mini, Panayiota, Ph.D. Communication Arts, University of Wisconsin - Madison.

Research interests: Russian cinema, Greek cinema, Film theory.

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Polychronakis Dimitrios, Doctoral degree, Mondern

Greek philology, University of Crete.

Research interests: 19th century literature (poetry, prose, criticism), 20th century literature (symbolism, modernism), Aesthetics and theory of literature.

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 Spanoudakis, Konstantinos, Ph.D., Classics, University of St. Andrews.

Research interests: Hellenistic poetry, Greek imperial poetry.

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#### **Emeriti**

- Detorakis, Theoharis, Doctoral degree, Byzantine Philology, National and Kapodistrian University of Athens. Research interests: Byzantine hymnography; Byzantine hagiography; history of Crete.
- e-mail: detorakis@phl.uoc.gr, Tel: 0030 28310 77262
- Hatzipantazis, Theodoros, Doctoral degree, University of Thessaloniki.

Research interests: History of Modern Greek theatre and drama.

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

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

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 Tsagarakis, Odysseus, Dr., Classics, Ludwig-Maximilian Universität of München.

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

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 inter-university 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)
- as teachers of Greek as a foreign language
- o 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
- 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, e-mail: history@phl.uoc.gr

Head of the Department: Professor Christos Loukos

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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 method; 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 400 postgraduate students. At the undergraduate level, the ratio of teaching staff to students is 1:25.

The academic staff is composed of 26 members, 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 research experience. The



highlight of these occasions is the annual field trip, 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 A1: Ancient and Medieval History

	Courses
Ancient Greek Prose Reading or Ancient Greek Philology/Latin (compulsory to take at least one course in Ancient Greek prose reading and two courses in Latin. Papyrology is considered Free Choice)	6
Byzantine Philology	1
, , , , , , , , , , , , , , , , , , , ,	-
Pedagogics (of which one compulsory course involving teaching practice)/Free Choice	3
Modern Greek Philology	1
Ancient History	5
Byzantine History	3
Medieval History	3
Modern and Contemporary History	4
Arab, African and/or Turkish History	2
Any History Course	2

Prehistoric, Classical, and Byzantine Archaeology (not all in the same subject)	4
Art History	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 History (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)	1
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 to take any course in Pedagogics; at least one of their free choices must be in History)	3
Foreign Language	4
Total number of courses (each course is completed in one semester)	52

## Degree Programme B: Archaeology

	Courses
Ancient Greek Prose Reading	2
Ancient Greek and/or Byzantine Philology	3
Latin	2
Modern Greek Philology	2
Pedagogics (of which one or both may involve teaching practice)/Free choice	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
Prehistoric Archaeology	4
Classical Archaeology	4
Byzantine Archaeology	4
Art History	5
Any Archaeology (Prehistoric, Classical, Byzantine)	I
Free Choice	5
Seminars (one in Prehistoric Archaeology, one in Classical Archaeology, one in Byzantine Archaeology,	
one in Art History, one in any Archaeology [Prehistoric, Classical, or Byzantine] or Art History and one	
in any Archaeology or Art History or History)	6
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 Prose Reading, 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:

- Lecture courses: 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 make an oral presentation 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. The following postgraduate programmes are currently offered by the Department:

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

Interdepartmental postgraduate programmes:

☐ Contemporary Greek and European History

- Byzantine Studies
  - o Byzantine History
  - o Byzantine Archaeology and Art History
  - Byzantine Philology

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 June for the winter semester.

The minimum requirement for obtaining a first-cycle postgraduate degree is to successfully complete four or five seminars 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 may be extended 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 train scholars able to conduct research in the humanities, and leads to the doctoral degree. 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 submitted six semesters after its topic was approved, but it is possible to be granted permission to defer submission.

#### 2.4 FACULTY MEMBERS

## **Professors**

Avdela, Efi, Doctorat, Université Paris 7-Jussieu.
 Research interests: Social and cultural history in post-war years.

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

 Hadziiossif, Christos, Doctorat, 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, Dr., 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, Doctoral degree, National and Kapodistrian University of Athens.

Research interests: The Greek Revolution of 1821; social issues of Modern Greek cities; issues of the history of the Greek State; history of Latin America.

e-mail: loukos@phl.uoc.gr, Tel: 0030 28310 77358

 Stampolidis, Nicholaos Chr., Doctoral degree, 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.

e-mail: stampolidis@phl.uoc.gr, Tel: 0030 28310 77339

#### Associate Professors

Gratziou, Olga, Dr., 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

Karanastassis, Pavlina, Dr., University of Heidelberg.
 Research interests: Greek and Roman sculpture; Iconography of the Roman Emperors and historical interpretation; The 'Romanization' of the Eastern provinces of the Imperium Romanum.

e-mail: karanastasi@phl.uoc.gr, Tel: 0030 28310 77356

Kopaka, Katerina, Doctorat, Université 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

 Petmezas, Socrates D., Doctorat, 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

 Tzachili, Iris, Doctoral degree, 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., 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., 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 periods; 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, Doctoral degree, University of Crete.

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

e-mail: kioussopoulou@phl.uoc.gr, Tel: 0030 28310 77365

 Matthiopoulos, Eugene D., Doctoral degree, University of Crete.

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

Missiou, Anna, Ph.D., 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

• Sakellariou, Eleni, Ph.D., University of Cambridge. Research interests: Late medieval European history; southern Italian history; economic history; demographic history; urbanisation; small towns; institutional history; the interaction between the state and the economy; social history; judicial records; the history of the Latin (Frankish and southern Italian) dominions in Greece after the Fourth Crusade. e-mail: sakellariou@phl.uoc.gr, Tel: 0030 28310 77354

#### Lecturers

Anastasopoulos, Antonis, Ph.D., 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

 Foskolou Vassiliki, Doctoral degree, National and Kapodistrian University of Athens.

Research interests: Byzantine Monumental Painting; Iconography; Byzantium and the West: Interrelations in Art; Aspects of private devotion in the Byzantine world: artifacts, beliefs and practices.

e-mail: foskolou@phl.uoc.gr, Tel: 0030 28310 77340

Kokkinakis, Ioannis, Doctoral degree, University of Crete.
 Research interests: Monetary history; Welfare State; Cretan history.

e-mail: kokkinakis@phl.uoc.gr, Tel: 0030 28310 77359

 Kolovos, Elias, Doctoral degree, Aristotle University of Thessaloniki.

Research interests: Peasant history (15th -18th c.); History of

monasteries under Ottoman administration; Insular societies in the Ottoman Empire.

e-mail: kolovos@phl.uoc.gr, Tel: 0030 28310 77341

- Kyritses, Demetrios, Ph.D., Harvard University.

  Research interests: The social and economic history of the Byzantine Empire from the 11th to the 15th centuries.

  e-mail: kyritses@phl.uoc.gr, Tel: 0030 28310 77353
- Moustakas, Konstantinos, Ph.D., University of Birmingham.
   Research interests: Economic and demographic history of late Byzantium and the early Ottoman Empire; the transition from the Byzantine to the Ottoman system.
   e-mail: moustakas@phl.uoc.gr, Tel: 0030 28310 77355
- Panagopoulou, Katerina, Ph.D., University of London.
   Research interests: Economic and Social History of the Classical, Hellenistic and Roman Period; Hellenistic Kingship; Greek and Roman Numismatics; Precious Metals and the Economy.

e-mail: panagop@phl.uoc.gr, Tel: 0030 28310 77357

 Serghidou, Anastasia, Doctorat, Ecole des Hautes Etudes en Sciences Sociales, Paris.

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

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

## Specialized Teaching Staff

• Aksoy-Aivali, Gülsün, M.A. in Translation and Interpretation, University of Graz.

Research interests: Turkish language. e-mail: aivalig@uoc.gr, Tel: 0030 28310 77378

• Genaraki, Amalia, M.A. 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

#### **Emeriti Professors**

- Avramea, Anna, Professor of Byzantine History.
- Faraklas, Nikolas, Professor of Classical Archaeology.
- Hadjinikocalou, Nikos, Professor of Art History.

## **Honorary Doctors**

- Iliou, Filippos, Historian of the Greek Enlightment.
- Vernant, Jean Pierre, Professor of the History of Ancient Greece, College de France.
- Van Effenterre, Henri, Professor of Archaeology, Université Paris I.

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,

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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 the corner of Patriarchou Grigoriou and Patelarou Streets in Rethymno.

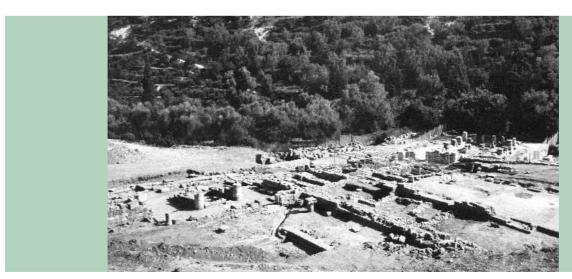
Several members of the academic staff of the department run and participate in research projects which are carried out at the Institute for Mediterranean Studies (I.M.S.) in Rethymno. I.M.S. is one of the research units of the Foundation for Research and Technology - Hellas (FO.R.T.H.) and focuses on 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 library. The Institute for Mediterranean Studies is located at 130 Nikiphorou Phoka Street in Rethymno (tel: 0030 28310 25146, fax: 0030 28310 25810, www.ims.forth.gr).

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, Bogaziçi University (Istanbul) and many more.







Orthi Petra - Eleftherna

## 3. DEPARTMENT OF PHILOSOPHY AND SOCIAL STUDIES

Website: www.fks.uoc.gr

Head of the Department: Assoc. Professor Antonios Astrinakis

e-mail: astrinak@phl.uoc.gr ,Tel: 0030 28310 77239/77236

Departmental Secretariat

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

Departmental Secretary: Angeliki Vavouraki

#### 3.1 BACKGROUND 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 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. At the end of their second year of study, students choose their major area of interest, i.e. Philosophy or Theory and Methodology of Social Sciences.

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 that 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.

Optional courses are offered by the Divisions of the Department in the following areas:

## **Division of Philosophy**

## I. Logic, Metaphysics, Epistemology, Philosophy of Science

Classical and Symbolic Logic
Metaphysics and Ontology
Epistemology
Philosophy of Language
Philosophy of Mind and Psychology
Philosophy of Religion
Philosophy and History of Science
Philosophy of the Life Sciences
Philosophy of the Social Sciences

## II. Practical Philosophy

Ethics (Normative Ethics; Metaethics; Applied Ethics; Bioethics)
Social Philosophy
Political Philosophy
Philosophy of Law
Aesthetics-Philosophy of Art
Philosophy of Education

## III. History of Philosophy

History of Ancient Greek Philosophy (Presocratics; Plato; Aristotle; Hellenistic Philosophy; Philosophy in Late Antiquity)

History of Mediaeval and Byzantine Philosophy History of Modern Philosophy (Rationalism; Empiricism; Kant; German Idealism; Schopenhauer; Nietzsche; History of Modern Greek Philosophy)

History of Twentieth-Century Philosophy (Phenomenology; Analytical Philosophy; Logical Positivism; Pragmatism; Existentialism; Marxism; Critical Theory; Philosophical Hermeneutics)

# Division of Theory and Methodology of the Social Sciences

## I. <u>Theories, Methodology, and Epistemology of the Social</u> Sciences

Epistemology of the Social Sciences Research Methodology in the Social Sciences Educational Theories Psychological Theories Sociological and Anthropological Theories

# II. <u>Human development, Mind, Emotion, Values, and Learning</u>

Educational Subjects (teaching methodology; life-long learning)

Psychology (cognitive psychology; psychology of emotions; developmental psychology; social psychology)

Sociology and Anthropology (sociology of knowledge; sociology of self and identity; moral sociology; sociology, and anthropology of emotions)

Interdisciplinary Subjects (human development; interpersonal relations; group processes and inter-group relations)

### III. Culture, Education, and Politics

Educational Subjects (sociology of education; history of education; comparative education; culture and education)
Psychology (psychology of art; educational psychology; cultural psychology)

Sociology and Anthropology (sociology of culture; cultural anthropology; anthropology of art; sociology, and anthropology of deviance; political, and historical sociology) Interdisciplinary Subjects (art; religion and ideology; communication; gender, identity, and roles)

#### 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 specialization: Ancient and Byzantine Philosophy, and Modern and Contemporary Philosophy.

In September 2003 a joint postgraduate programme in Bioethics was established, with the collaboration of the Departments of Philosophy and Social Studies (coordinator), Biology, Medicine, and Sociology of the University of Crete.

This programme, which is also funded by the E.U. is unique 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.

Since 2004 the Department participates in the interdisciplinary postgraduate programme "Brain and Mind" with the Departments of Medicine, Physics and Computer Science of the University of Crete and the Departments of Nursing and of Philosophy and History of Science of the University of Athens (see http://brainmind.med.uoc.gr/).

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 Doctoral degree to those who successfully write and defend a doctoral thesis in the areas of Philosophy, Psychology, Sociology, Social Anthropology and Pedagogy.

## 3.4 FACULTY Members

## Division of Philosophy

Head of Division: Konstantinos Androulidakis

## 74 Professors

 Roussopoulos, George, Director of Joint Graduate Programme in Philosophy: Science, Values and Society, Doctoral degree, University of Ioannina.

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

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

#### Associate Professors

 Androulidakis, Konstantinos, Dr., Ludwig -Maximilians - Universitaet Muenchen.
 Research interests: Kant, German Idealism, theory of

reason and rationality, philosophy of literature.

e-mail: androulidakis@phl.uoc.gr, Tel: 0030 28310 77205

- Lebedev, Andreas, Dr., University of Moscow.
   Research interests: Ancient philosophy.
   e-mail: lebedev@phl.uoc.gr, Tel: 0030 28310 77207
- Maragos, George, Doctorat, Universite de Provence (Aix Marseille I).

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

e-mail: gmaragos@fks.uoc.gr, Tel: 0030 28310 77225

• Tsinorema, Stavroula, (Head of the Department 2000-2002, 2002-2004), Director of Joint Graduate Programme in Bioethics (2003-), former Director of the Joint Graduate Programme in Philosophy: Science, Values and Society (2002 - 2004), Ph.D., University of Exeter Research interests: Moral philosophy, epistemology,

philosophy of language, theories of rationality, bioethics, science and values.

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

#### Assistant Professors

 Kavoulakos, Konstantinos, Doctoral degree, Panteio University (Athens).

Research interests: Social and political philosophy, Kant and German Idealism, theories of democracy, critical theory, hermeneutics.

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

• Venieri, Maria, Dr., Ludwig - Maximilians - Universitaet
Muenchen

Research interests: Philosophy of perception, philosophy of mind and language, Wittgenstein, epistemology. e-mail: venieri@phl.uoc.gr, Tel: 0030 28310 77219

#### Lecturers

 Balla, Chloe, Doctoral degree, Aristotle University of Thessaloniki.

Research interests: Ancient Philosophy (Sophists-Plato-Aristotle; Early history of rhetoric).

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

 Karamanolis, Georgios, Ph.D., University of Oxford (Keble college).

Research interests: Ancient Philosophy, Medieval Philosophy. e-mail:gkaramanolis@fks.uoc.gr, Tel: 0030 28310 77209

 Sargentis, Konstantinos, Doctoral degree, National and Kapodistrian University of Athens.

Research interests: Ethics, Plato, Kant, Philosophy of Action. e-mail: sargentis@fks.uoc.gr, Tel: 0030 2831 77204

 Theodorou, Panos, Doctoral degree, National Technical University of Athens. Research interests: Phenomenology, Philosophy of Science e-mail: pantheo@fks.uoc.gr, Tel: 0030 28310 77206

#### **Emeritus Professors**

Dragona - Monachou, Myrto.

## <u>Division of Theory and Methodology of Social Sciences</u> Head of Division: Antonios Georgoulas

#### **Professors**

 Kugiumutzakis, Giannis, Head of the Department (2004-06), Dr., 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 77238/6

Pigiaki, Kalliopi, Ph.D., 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

#### Associate Professors

 Astrinakis, Antonios, Doctoral degree, Panteion University (Athens).

Symbolic Interactionism, Social Cognition and Emotion Theories; Group, Role and Identity Processes.

e-mail: astrinak@phl.uoc.gr, Tel: 0030 28310 77236/201

 Georgoulas, Antonios, Doctorat, Universite des Sciences Humaines de Strasbourg. Research interests: Sociology; cultural anthropology. e-mail: georgoul@phl.uoc.gr, Tel: 0030 28310 77226

 Nikolakakis, Georgios, Doctorat, Universite Paris X -Nanterre.

Research interests: Cultural anthropology; film studies; hermeneutics.

e-mail: nikolakakis@phl.uoc.gr

 Panayiotopoulos, Nikos, Doctorat, Universite 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

#### **Assistant Professors**

- Palios, Zacharias, Ph.D., 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
- Stamatopoulou, Despina, Ph.D., 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

#### Lecturers

 Dalakoura, Katerina, Doctoral degree, Aristotle University of Thessaloniki.

Research interests: History of Greek Education (19th-20th c.); History of Education in the Greek Communities of the Ottoman Empire (19th-beginig of 20th c.); History of Women's Education (late 18th-20thc); Enlightenment and Womanhood; Gender and Education; Epistemology and

methodology of Historiography. e-mail: dalakoura@phl.uoc.gr , Tel: 0030 28310 77234

 Kaklamani, Stamatina, Doctorat, Université des Sciences Humaines de Strasbourg.

Research interests: Social Statistics and Methods of Social Research.

e-mail: kakltina@otenet.gr, Tel. +30 2831077214.

 Katsarou, Eleni, Doctoral degree, National and Kapodistrian University of Athens.

Research interests: Curriculum Theories, Teaching Methods, Literacy, Teachers' Professional Development, Educational Evaluation, Action Research in Education. e-mail: analyst@hol.gr Tel. 0030 28310 77229

- Tsantiropoulos, Aris, Social Anthropology.
   Research interests: Social Anthropology; Ethnography of Greece; Forms of social conflict (specifically blood feud);
   Social transformation; Psychoanalysis and Anthropology.
   e-mail: aris@phl.uoc.gr, Tel. +30 283107726
- Tsourtou, Vasiliki, Developmental Psychology.
   Research interests: Infant and Children development, emotions and cognition, shelf.
   e-mail: vtsourtou@phl.uoc.gr, Tel. +30 2831077202
- Vafeas, Nikolaos, Historical and Political Sociology.
   e-mail: vafeas@fks.uoc.gr

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities.

The Department employs Adjunct Professors/Lecturers (Michelis Chair in Aesthetic Theories) 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.

#### 3.6 COLLABORATION WITH FOREIGN UNIVERSITIES

The Department of Philosophy and Social Studies participates in several inter-university programmes through which it cooperates with similar departments at various European universities. Under the Socrates-Erasmus Programme the Department collaborates with the following institutions: Université Libre de Bruxelles, Université de Metz, Ludwig-Maximilians Universitaet Muenchen, University of Edinburgh, Middlesex University, University of Sheffield, Froebel College, Universita degli Studi di Genova, Institut Universitaire de Formation des Maitres de Midi-Pyrenées, Universidad de Valladolid, Oslo University College and Central European University.

#### 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
- in publishing companies and organizations
- in public service

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- 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)
- in mass media





## FACULTY OF EDUCATION

### **DEPARTMENTS:**

- **+ Primary Education**
- **♦ Preschool Education**



Immediately after the foundation of the Faculty of Education, the election of the first Dean of the school followed.

The Deanery comprises the Dean, the Head of the Department of the Primary Education, the Head of the Department of the Pre-School Education and one representative of the students from each Department.

The purpose of the Faculty of Education is defined by the particular objectives of its associated units and consists of the advancement of the Science of Education and Educational teaching and research as well as the professional training of its students, future elementary and kinder garden teachers.

#### THE FUNCTION OF DEANERY

The Dean of the Faculty of Education presides over the faculty meetings of the school. While in his absence he is represented by a legally appointed substitute after a written or in special cases oral order of the Dean.

The members of the Deanery meet whenever the Dean deems necessary or when the 1/3 of its members expresses the need for it.

The secretarial duties during the meetings of the school of Education are performed by the head Secretary of the Faculty.

### **Dean's Office**

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Dean's Secretariat
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"The wall became light", by the ever memorable Frixos Theodosakis, member of teaching staff of the Department of Primary Education, of the University of Crete.

#### 4. DEPARTMENT OF PRIMARY EDUCATION

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Head of the Department: Professor Costas Tzanakis

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Departmental Secretariat

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Departmental Secretary: Eleni Moundaki

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#### 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 100 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 for their profession.
- Improve the level of education based on the constantly changing needs of the field.
- Participate in the search for solutions to specific 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 in student number 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

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 final year dissertation.

Additionaly students must complete 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 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 History of Greek Education
- o Intercultural Education
- Sociology of Education
- o Comparative Education
- Teacher Education

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 society. The equality of educational opportunities within the framework of the welfare state.
- The intercultural 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 Developmental Psychology

- o Social Psychology
- o Special Education
- o Research Methodology

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 Teaching Methodology
- o Educational Technology
- o Evaluation and Assessment in 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 Curricula with their corresponding extensions in the school systems and in the instructional process.
- The connection of Curricula 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

#### 4.3.5 Division of Science and Mathematics

This Division includes the subject areas of:

- o Teaching and Epistemology of Mathematics
- o Teaching and Epistemology of Physics
- Biology, Human Biology, Ecology and Environmental Education
- o Informatics in Education

The objective of this Division is the education of prospective primary school teachers in Mathematics, Physics, Biology and Ecology, Environmental Education and Information Technology as well as in the Didactics of Mathematics, the Didactics of Physics and the application of new technologies in education.

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#### 4.4 POSTGRADUATE STUDIES

The Programme of Postgraduate Studies has been operating since the academic year 1993-94. The objective of the Programme is to help its students 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 in the Pedagogical Sciences, and also to a Doctoral degree 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,
- Graduates of other Departments of Greek Universities, provided that they have successfully passed at least four pedagogical courses during their undergraduate studies.
- c. Graduates of foreign universities can also apply 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.

Applicants must successfully take a written examination on 3 subjects:

- 1. Introduction to the Pedagogical Sciences
- 2. Course of specialization
- 3. Foreign Language

Applicants 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**

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 Michaelides, Panagiotis, Doctoral degree, National and Kapodistrian University of Athens.

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 Moudatsakis, Tilemachos, Doctorat, University of Paris IV, Sorbonne.

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#### **Associate Professors**

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Kourkoutas, Ilias, Doctorat, University of Liege.
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- Vasilaki, Eleni, Ph.D., University of Dundee.
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- Vlahaki, Irini, Doctoral degree, University of Crete.
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#### Lecturers

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#### Specialized Teaching Staff

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

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Psaroudaki, Stamatia, M.A. Eastern Mishigan University.
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Specialized Technical Personnel (Undergraduate Students Laboratories)

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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 Phycical Sciences and 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



#### 5. DEPARTMENT OF PRESCHOOL EDUCATION

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Departmental Secretary: Eugenia Mylona

#### 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.
- Offer the necessary academic and scientific qualifications to prepare them for their career.
- Contribute to research concerning educational problems.

#### 5.2 UNDERGRADUATE STUDIES

The courses offered at the Department are designed to:

- Enhance the search for knowledge and promote cooperation in a democratic context..
- 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 five categories. These are:

- a. The compulsory basic courses, offered during the eight semesters of the Undergraduate programme.
- b. The required optional courses.
- c. The compulsory seminars, attended by a restricted number of students (up to 20).
- d. The Teaching Practica, which are compulsory and take place in experimental or other nursery schools in the city or province. The Teaching Practica are organized in three levels, each covering one year of study.
- e. 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 156 credit hours. All courses (lectures and seminars) are taught three hours per week, except for the practica which can cover more teaching hours, according to the course instructor's assessment. The courses taught take the form of: a) Lectures, b) Seminars, or c) Teaching Practica. Lectures and Seminars can be attended by students of other Departments.

The following table indicates the number of Lectures, Seminars and Teaching Practica required during the four years of studies.

Courses	Number	Course Credits
I. Compulsory Introductory/Basic courses	25	75
2. Required Optional Courses	17	51
3. Seminars	3	9
4. Senior Year Dissertation Seminar	I	6
5. Teaching Practica	5	15
Total	51	156

All students prepare and defend a Senior Dissertation of their choice within the study areas offered by the Department of Preschool Education. Accordingly, they attend a special seminar three hours per week, during the last semester of their studies; the maximum number of participants in this seminar is 12 students. The supervisors are responsible for the organization of these 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 that the student must meet in order to participate in each seminar are specified by the supervisor. Each student submits his/ her Senior Dissertation to the Departmental Secretariat. These papers constitute a data bank, useful for the scientific aims 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 are the following:

- I. Educational Sciences (55 courses)
- 2. Psychology (28 courses)
- 3. Sociology (9 courses)
- 4. Philology, Philosophy, History, Theology (25 courses)
- 5. Mathematics, Statistics, Computer Science (10 courses)
- Music (4 levels), Aesthetic Education (5 levels), Physical Education (4 levels)
- 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 years 2000-2001 and 2006-

2007. The objectives of the postgraduate programme are:

- The acquisition and assessment of new scientific knowledge 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:
  - A) Preschool Education and Pedagogy
    - I. Theory and Practice in Preschool Education
    - 2. Language and Literacy in Preschool Education
  - B) Applications of Psychology in Education
    - I. Alternative Psychopedagogic Approaches
    - 2. Psychopedagogic Interventions for preschool and school ages
- b. Doctoral degree in Educational Sciences.

#### 5.4 FACULTY MEMBERS

#### **Professors**

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Research interests: Methodology of the activities of preschool education.

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• Tzavaras, Ioannis, Dr., Universität München. Research interests: Philosophy with an emphasis on metaphysics.

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#### Associate Professors

• Pourkos, Marios, Dr., Jagiellonian University of Krakow. Research interests: Pyschopedagogics: Alternative experiential contexts of cognitive, affective and moral development and education.

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

Research interests: Ancient Greek history with special emphasis on significant landmarks and their educational implications.

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

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#### **Assistant Professors**

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   Research interests: Sociology of the family.
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 Zaranis, Nikolaos, Doctoral degree, National Kapodistrian University of Athens.

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#### Lecturers

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- Karaiskou, Maria, Ph.D., King's College, University of London.

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 Tzakosta, Marina, Ph.D., University of Leiden.
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### Specialized Teaching Staff

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Research interests: Physical education.

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 Ioannidou, Ioanna, Doctoraal 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: ioann@edc.uoc.gr, Tel: 0030 28310 77670

• Tsoupakis, Antonios, B.A. in Painting Accademia di Belle Arti "Pietro Vannucci" Perugia, B.A., in Architecture, Politecnico di Milano.

Research interests: Painting combined with technical design.

Tel: 0030 28310 77671

 Zervoudakis, Stylianos, Degrees in Western Music, Greek Conservatory of Music.

Research interests: Music Education.

e-mail: szeboud@edc.uoc.gr, Tel: 0030 28310 77669

### Specialized Technical Personnel

- Chlapana, Elissavet
   e-mail: exlapana@edc.uoc.gr, Tel.: 0030 28310 77696
- Nyktaris, Konstantinos
   e-mail: knyktaris@edc.uoc.gr, Tel: 0030 28310 77888

Administrative Staff

Patsahaki, Evaggelia
 Tel: 0030 28210 77650

• Sampson, Sofia

Tel: 0030 28210 77651

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

#### 5.5 LABORATORIES

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

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#### 5.5.1 Educational Research and Implementation

Tel.: 0030 28310 77696

Director: Effimia Tafa, Tel.: 0030 28310 77661

The Laboratory contains two units:

 The Teaching Methodology and Implementation Unit, and Responsible: Vassilios Oikonomidis, Tel.: 0030 28310 77657

The Educational Psychology Research Unit.
 Responsible: Georgios Manolitsis, Tel.: 0030 28310
 77665

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 acquisition and use of language, body language, mathematics, art, music and drama, comparative and interactive educational approaches for the teaching process.

#### 5.5.2 Research in Psychology

The Laboratory consists of two units:

- The Ecological Psychology Unit
   Responsible: Marios Pourkos, Tel.: 0030 28310 77666
- The School Psychology Unit
   Responsible: Anastasios Matsopoulos, Tel.: 0030 28310
   77656

The Laboratory is designed to meet both the academic and the research needs in the fields of Psychology taught within the Department. These are: General Psychology, Developmental Psychology, Educational Psychology, Social Psychology, Cognitive Psychology, and Psychodynamic Psychology.

### 5.5.3 Dramatic Play and Art Education

Director: Andreas Fountoulakis, Tel.: 0030 28310 77672 The Laboratory aims to support the academic and research needs in the areas of Drama, Art, and Handicrafts. Emphasis is given to self-expression through the expressive arts, such as Dramatic Play, dramatization, puppet show, marionettes and shadow theatre.

#### 5.5.4 Music and Movement

Responsible: Marina Sotiropoulou-Zorbala, Tel.: 0030 28310 77662

The purpose of this Laboratory is to serve academic and research needs in the field of Music Education. Attention is paid to facilitating young children's self-expression through listening, responding to and 'creating' music by moving, singing and improvisation.

#### 5.6 SCIENTIFIC CONGRESSES

The Department has organized a number of Panhellenic and International Congresses, with renowned scientists from both Europe and the United States. In recent years, these have included:

- 13-14 May 1994: "Psychological and Educational Development in Early Chilhood"
- 21-23 October 1999: "Research in Early Childhood Education"
- 18-20 October 2001: "Educational Psychology in Early Childhood"
- 22-23 November 2002: "Language and Mathematics in Early Childhood"
- II-I5 November 2003: "Moral and Religious Development and Education of Young Children"
- 05-06 November 2004: "Body, Education and Practical Knowledge. Socio-cultural Practices and Dimensions of Non-Verbal Communication and Narrative".
  - 12 May 2006: "Social, Historical and Cultural

Dimensions of Learning and Development Processes"

13 May 2006: "History in Preschool Education: Theory and Practice"

18 May 2006: "Narrative - Fairy-tale - Psychology: From the Folk Narrator to Pedagogical Practice"

24 November 2006: "Exploring the Meaning and the Role of Narrative and the Fairy-tale"

16-17 March 2007: "Theory and Qualitative Research Methods: Perspectives and Limits"

5 May 2007: "Education, Democracy and Human Rights"

25-27 May 2007: "Perspectives and Limits of Dialogism in Mikhail Bakhtin: Applications in Psychology, Art, Education and Culture"

19-20 October 2007: "Emerging Literacy: Research and Applications"

#### 5.7 CAREER OPPORTUNITIES FOR GRADUATES

Graduates of the Department of Preschool Education can be employed at:

Public and Private Preschools, Schools for Special Children, Day-care Centres and Crèches, Children's Hospitals, Summer Camps for Children, Hotels (babysitting – children's entertainment), Children's Museums, Publishing Houses of educational books, Radio and T.V. Stations- organizing and participating in children's programmes, Municipalities and Prefectures (in-service training and folk education), Institutes for Professional Education, Centres for Creative Activities, Childcare Institutions, Music and Art Workshops, Public Service Organizations and Educational Institutions, Educational Institutions for Preschool Education, Inspection of Education: Administration and Supervision, Research Centres for Educational Sciences.

## 5.8 CRETAN PRESCHOOL TEACHERS' COLLEGE OF INSERVICE TRAINING (C.P.T.C.I.T.)

The C.P.T.C.I.T. was founded in the academic year 1998-99. It is incorporated into the Department of Preschool Education of the University of Crete, which has the responsibility for its administration and operation. Within this framework the C.P.T.C.I.T. is authorized to cooperate with other Departments in order to meet its academic needs.

The purpose of the C.P.T.C.I.T. is to provide specialized studies for preschool teachers. More specifically, the objectives of the C.P.T.C.I.T. are to:

- Follow up developments in the field of education, in particular in preschool education and information technology.
- Promote research methods, acquisition of academic qualities and skills, use of resources and dissemination of experiences which contribute to development of preschool education.
- Provide the necessary knowledge and skills which ensure a scientific and professional career in Preschool Education.

By law, those eligible to attend the C.P.T.C.I.T. Programme are preschool teachers who have completed at least five years of teaching in private and/or public schools. The selection of candidates is made by the Ministry of Education following written examinations. Course attendance is mandatory. During the studies the participants are exempt from teaching obligations.

Those who successfully complete the two-year programme at the C.P.T.C. of Crete receive a diploma from the Preschool Teachers' College of Crete, which entitles them to all the rights of University graduates from the Department of Preschool Education. The maximum number of every year new participants in the C.P.T.C.I.T. is 30. Up to now 101 preschool teachers have graduated and 41 are now participating in the programme.

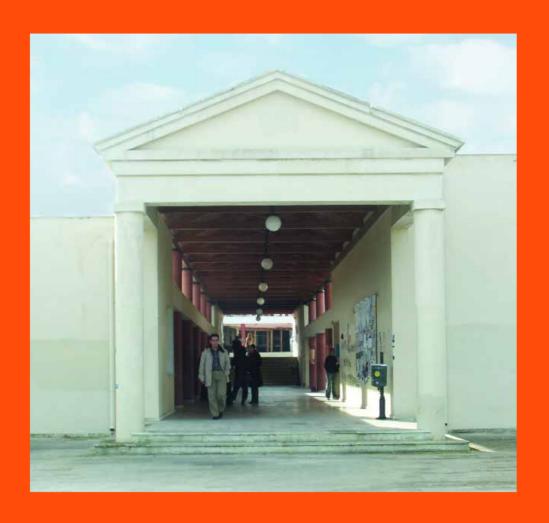


This lily, among the most beautiful of the autumn wildflowers in Crete, can be found in the oak forest at the University campus in Rethymno.

### FACULTY OF SOCIAL SCIENCES

### **DEPARTMENTS:**

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



## A. COMPUTER LABORATORY-FACULTY OF SOCIAL SCIENCES

Director: Athanasios Papadopoulos

System Administrator: Alexandros Fragkiadakis

The Computer Laboratory is housed in the same building as the Dean's Office. It was created to serve the needs of both the students and the teaching staff of the four departments of the Faculty: Sociology, Economics, Psychology and Political Science.

#### I. Staff - Operation

The Computer Laboratory is staffed by the following Specialised Technical and Laboratory Personnel: Kostas Pigounakis (Dept. of Economics), Alexandros Tsirintanis (Dept. of Sociology), Pelagia Tsakiraki (Dept. of Political Science), Marina Papadaki (Dept. of Sociology) and Georgios Kandylis (Dept. of Psychology). The operation of the Computer laboratory is additionally supported by students from the four departments of the Faculty. For the current academic year, the Computer Laboratory will be operating every weekday from 09:00 to 18:00. Administrative support for the Lab is provided by the Dean's Office.

#### 2. Services

#### a. General Computer Services

The Computer Laboratory is a modern well-equipped Lab that fully responds to the needs of the Faculty. It provides personal computers (PCs) with permanent Internet connection and a variety of software programs for statistical data analysis, accounting, econometrics and additional teaching and research purposes.

The Computer Laboratory offers the Faculty's students free access to word processing and printing of course and seminar term papers, along with the use of specialised

### **Dean's Office**

Dean: Professor Athanasios Papadopoulos
Tel: 0030 2831077861
E-mail: appapa@econ.soc.uoc.gr

Dean's Secretariat

Dean's Secretary: Theodora Rozaki
Tel/Fax: 0030 2831077860

E-mail: deansocial@econ.soc.uoc.gr
website: www.soc.uoc.gr



software for research needs. Both students and teaching staff can utilize the Internet services as well as a variety of other services related to courses offered by the Faculty, and research requirements.

Also operating continually within the Lab throughout the academic year are foreign language teaching support software programs.

Printing services are supported by two Laser printers connected through a local area network (LAN).

#### b. Teaching Services

The Computer Laboratory is also utilized for teaching purposes during the academic year. Regularly scheduled courses which take place in the Lab during the semester include the Computer courses of the various departments of the Faculty, and teaching applications or exercises in courses of quantitative methods with the support of appropriate software.

In addition the Lab provides specialised software and multimedia which support the foreign language courses offered by the Departments.

#### c. E-mail Services

The Computer Laboratory provides e-mail services to all Faculty members (professors, students, administrative staff, specialised technical and laboratory personnel, specialised laboratory and teaching staff). These services are supported by a total of four mail servers (one per Department). Every e-mail account can be accessed via any e-mail client program (POP3/IMAP4) or via the Internet (Web Mail).

Users can personalize their accounts (including the password) through the Faculty of Social Sciences website at the following address: http://www.soc.uoc.gr

#### d. World Wide Web Services

The Faculty maintains and regularly updates a dynamic website (www.soc.uoc.gr). Among the objectives of the

website is the promotion of the Faculty's departments at the national and international level. The Faculty's website hosts the individual websites of the Faculty's Departments, as well as of the individual websites of staff members. It provides information regarding upcoming events sponsored by the Departments and the Faculty.

#### e. Internet Services

Members of the Faculty can use the Computer Laboratory to gain direct access to the Internet.

## f. File Administration and Disposition Services through FTP (File Transfer Protocol)

Faculty members can access personal and also public areas in the FTP server of the system through ftp.soc.uoc.gr for easy and safe exchange and storage of large files that are available from all over the world.

#### **B. EUROPEAN INTEGRATION LABORATORY**

Director: Professor Athanasios Papadopoulos Department of Economics

The establishment of this Laboratory, as an interdepartmental laboratory in the Faculty of Social Sciences of the University of Crete, was approved on April 20, 2001. It officially began operation on October 19, 2001 following the Faculty's appointment of the first Director. Its activities serve teaching and research needs in the academic fields of European integration and of European studies and research in all four interrelated disciplines - economics, sociology, psychology and political science - that are taught in the Faculty Departments. Its mission includes cooperation with domestic and foreign research centres and academic institutions that have similar objectives, as well as the organizing of seminars, symposia, lectures and the preparation of related publications.

#### **Objective**

Overall the objective of the European Integration Laboratory encompasses the following four interrelated pillars:

- Pillar I: Scientific Research: In the present phase, four research programs are already in operation and an additional three have been scheduled.
- Pillar II: Scientific conferences and seminars: Seven European symposia and nine workshops have either taken place or are in progress.
- Pillar III: Scientific activities: Activities aiming at the promotion of links with the local community through a series of lectures have been planned.
- Pillar IV: Publications: These include a booklet about European Studies in Crete, as well as four collective volumes, one of which is forthcoming.

## C. JEAN MONNET EUROPEAN CENTRE OF EXCELLENCE

Director: Professor Andreas Moschonas

Department of Sociology

Jean Monnet European Chair Holder

This Centre was established on January 25, 2001 by a joint decision of the University of Crete and the European Union Commission and commenced operation on September I, 2001. Among its immediate priorities are the promotion of the University of Crete through the collection of resources and knowledge at the University that relate to the study of and research about European integration, in order to build a centre of excellence on European issues.

More specifically, the Centre of Excellence is a framework, or more accurately a structure, in the field of

European integration, which carries an internationally recognized name, Jean Monnet. The Centre aims to provide an umbrella, at the university level, for: (a) the Jean Monnet professors as well as all other professors who offer courses in European integration at the University of Crete; (b) the existing European Documentation Centre; (c) the specialised European Integration Laboratory that is already operating within the University; (d) the research projects in the area of European integration; (e) the non-academic staff at the University who work on relevant issues; as well as (f) sources in the local community who are involved in activities related to European integration.

In order to achieve this goal, the University encourages the development of multi-disciplinary or inter-disciplinary scientific activities of various types, related to European integration, both within the University and within the local community. At the same time, it provides the University with the opportunity to act as a credible and compatible partner with the outside world and to make contract agreements of academic cooperation in this field.



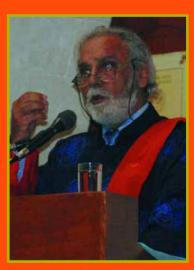
# Hononary Directorates of the Department of Sociology



Professor Nikos Mouzelis



Professor Charles Tilly



Professor Konstantinos Tsoukalas

#### 6. DEPARTMENT OF SOCIOLOGY

website: www.soc.uoc.gr/social, e-mail: regist@social.soc.uoc.gr

Head of the Department: Professor Andreas Moschonas
e-mail: moschonas@social.soc.uoc.gr, Tel: 0030 28310 77484

Departmental Secretariat

Tel: 0030 28310 77465/6, 77491, Fax: 0030 28310 77467

Head of the Secretariat: Chalkiadaki, Angeliki

#### 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 708 undergraduate students, 38 MAs students and 6 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 welldeveloped 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 in depth and breadth 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 Sociology of 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 hours per week) are distinguished into compulsory and optional courses. Not all courses are offered on a continous basis. Courses can take the form of Lectures, and Seminars. There is also Foreign Language Instruction, Senior Year Dissertation and 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 46 courses, of which II 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 carry six credit units, optional courses and seminars carry five credit units while the senior year dissertation carries fifteen 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.

#### **Required Courses**

Introduction to Sociology I
Social Theory I (Classical Theory)
Social Theory II (Classical Theory)
Social Theory III (Modern)
Social History
Social Statistics
Methods and Techniques of Sociological Research I
Methods and Techniques of Sociological Research II

Introduction to Political Sociology

Theories of Social Change and Development Modernity and Democracy Sociology of Culture Social History of Modern Greece

English for Sociologists - Level A Sociology of Law English for Sociologists - Level B Critical Theory - Studies in Authenticity and the Family English for Sociologists - Level C English for Sociologists - Level D

Introduction to Social Anthropology

Message Analysis

Modernity: Contemporary Theoritical Perspectives

Society and the Environment Gender Relations in Social History

Social Statistics II

Contemporary Anthropological Theory

**Economic Sociology** 

Computer Science and Research in Sociology

Anthropology of Transgression Sociology of Everyday Life Introduction to Criminology Sociology of Organizations

Political Sociology of European Integration

Sociology of the State Sociology of Bureaucracy Sociological of Political Parties

Sociology of Collective Action and Social Movements

Ideology and Culture Sociology of Education

Sociolonguistic realities. The State and Educational Policies

Basic Types of Sociological Theory

Ideology and Propaganda

Society and Language: Minorities, Youth, Gender

Social Theory and Epistemology Sociology of Communication

Contemporary Theories of Collective Action and Social

Movements

Sociology of the Labor Movement

Mass media and (post)modernity: From Mechanical to

**Required Elective Courses** 

Social Institutions - Social Control

Theories of Socialization

Historical Sociology of the Left

Comparative Political Sociology: The Euromediterranean

Dimension

Introduction to Sociology II

Socio-Political Education and the Teaching of Sociology

Sociology of Marriage and the Family

**Teaching Sociology** 

Sociology of Deviant Behaviour

Health and Illness:The Subjective Dimension Social Exclusion and Policies for Social Inclusion

Health Policy

The Crisis of Medical Institutions Sociology of Health and Illness

Historical Sociology

Research & Social-Scientific Writing in the English Language

Nationalism and Culture Sociology of Literature

Theories of Narrative

Sociology of Reading and Cultural Practices

Sociology of Leisure Sociology of Knoweledge

Contemporary Liberal Theories of Justice / Theories of

Human Rights

Sociology of Art

Sociology of Elites

Electronic Media

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Sociology of the Information Society Political Sociology of Mass Media Sociology of the Division of Labor Comparative Social Policy Social Policy Planning Issues Sociology of Labor Relations

Contemporary Theories of Class Analysis

Contentious Politics: Democratization and Revolution European Integration and the Modernization of the

Nation-State: The Greek Case

Forms of Informal Labor

**European Social Policy** Introduction to Social Policy Formation of Social and Political Identities

Social Policy and Welfare State

Sociology of Youth

Needs Assessment and Networks of Social Protection

Social Demography I Social Demography II

Society, Technology, and Development Local Development and Local Government

Modern Systems of Production

Communitarianism and Modern Society

**Urban Sociology** 

Sociology of Local Communities The Third World and Development Industrial Sociology - Sociology of Work I Industrial Sociology - Sociology of Work II

Technology - Work - Professions

Sociology of the Trade Union Movement

The State and Labor Adult Education

Society and Economy in the Inter-War Period

Society, Economy, and the State in Post-War Greece

Sociology of Small Enterprises

Introduction to the Theory of Regional Development Special Topics in the Sociology of Modern Greek Society:

"Society - Cinema - Interaction and Codes of Behavior at

the Turn of the Century"

Anthropological Theories of Kinship, the Family, and

Gender

The Social and Ideological Role of Cinema during the

Period of the Greek Asia Minor Campaign Anthropology of Religion and Ritual Practices

Sociology of Religion

Anthropological and Historical Approaches of Greek Rural

Communities

Society and Economy in Greece

The Cinematic Depiction of Mid-War Society

Islam and Alterity in the Balkans

Minorities in the Balkans

Cinematic Representations of Totalitarian Regimes

Sociology of Migration

Migration-Diasporas: Anthropological Approaches

Socio-Economic and Cultural Dimensions of Globalization

Rural Sociology

Introduction to the Methodology of Sociological Research

European Policies in the Agricultural Sector Physical Anthropology and Social Gender

Biology, Phsyche, and Society

Physical Anthropology: A Tool for tracing Social Gender

Sociology of Gender

Psychoanalysis and Social Theory

Gender and Politics Sociology of Nationalism

**Required Elective Seminars** 

Special Topics in Comparative Sociology

Aspects of the Experience of Chronic Illness and Disability

Special Topics in the Sociology of Deviant Behaviour

Alternative and Complementary Forms of Medicine Special Topics in the Sociology of Health and Illness

Sociology of Mental Health

Special Topics in Classical Theorists in Sociology

Special Topics in Modern Social Theory I Special Topics in the Sociology of Art Special Topics in Modern Social Theory II

Special Topics in the Sociology of Books and Reading

Special Topics in Contemporary Social Theory III

Special Topics in Historical Sociology

Tradition and Modernity in Local Communities

Special Topics in the Sociology of Leisure Special Issues in the Sociology of Elites

Social and Sociological Thought in Greece during the First

Half of the 20th Century

Special Issues in thw Sociology of Literature

Weber's Position towards the Protestant Work Ethic and

the Related Contemporary Debate Critical Theory and J. Habermas Special Issues in the Sociology of Law

History and Praxis

Special Topics in the Sociology of Development
The Communitarian Critique of Liberalism

Environment and Society (Body and Health)

**Economic Sociology** 

Communication and Local Space Social and Political Forces in Greece

Political Parties and Social Action in Post-War Greece

Gender Relations in Social History Special Topics in Urban Anthropology

Culture and Social Theory
Issues of Agrarian-Urban Areas

Anthropology of Exchange: Gift and Commodity

Modernity: Travels and Travelers America: Anthropological Approaches Special Topics in Criminology

Special Topics in Political Sociology

Sociology of thew Greek Bureaucracy

Dominant Ideologies in the 20th Century

Special Topics in Culture and Ideology

Special Topics in Culture and Ideology

Specific Topics in the Sociology of Youth

Special Topics in the Sociology of Education I

Special Topics in the Sociology of Education II

Special Topics in European Integration

European Integration and the Modernisation of the Greek

State

National State and Globalization

Sociology of the Trade Union Movement

Natural Law and the Construction of the State

Special Topics in the Epistemology of the Social Sciences

Sociological Research of the Information Society Special Topics in the Sociology of Mass Media

Special Topics in the Sociology of Mass Media and Visual

Culture

Industrial Society and the Culture of the Image

Social Policies of the European Union

Special Topics in Social Policy

Sociology of Minorities

Theories of Cultural Identities Body, Society, and Identity

The Issue of the "Other" and Social Research

Special Topics in the Society, Technology, and

Development

Special Issues in the Sociology of Labor Relations Socio-economic Restructuring and Social Movements Special Topics in the Sociology of Social Movements

Technological and Economic Restructuring Aspects of the Urban Phenomenon in Greece

Special Topics in Social Policy and the Welfare State

Community and Ideology

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Special Topics in the Sociology of Work

Special Topics in Social Policy and the Welfare Sate:

Employment Policies in the E.U. and in Greece

Sociology of Political Violence

Special Topics in the Third World and Development

Special Topics in the Third World and Development
Special Topics in the Social Anthropology of Religion
Special Topics in Social Anthropology: Ethnography of
Greece

Aspects of Popular Culture in Modern Greece Special Issues in Social Anthropology: Ethnography of Mediterranean Space

Special Issues in Social History: Modernity and the Body The History of Gymnastics and Sports: Nation, Class, Gender

Special Sociological Issues in Modern Greece (cinema and ancient greek spririt)

Modern Greek Society

Modern Greek Social Thinkers

Special Topics in Social Anthropology

Modern Greek Society: Historical and Critical Approach to the Welfare State

Greek Immigrants - Immigrants in Greece

Sociology of Gender: The Women's Movement in Contemporary Greece

Special Topics in Agrarian Sociology

Special Topics in the Sociology of Gender and the Media

Discourse Theory and Analysis

Special issues in Physical Anthropology and Social Gender

Qualitative Research Methods Seminar

Physical Anthropology and Social Gender

Collection and analysis of qualitative data in Sociology

Sociology of Law and Gender

Seminar in Quantitative Methods

Confinement and Narration

Social Representation of Crime and Violence in the Mass

Media

Crime and Gender

Social Identities and Multiculturalism

Local Social Change I: Social Transformation and Local Society

Local Development - Local Self-Administration: Special

Topics in Social Policy

Senior Thesis (Optional)

Senior Thesis (Optional)

Internship

#### 6.3 POSTGRADUATE STUDIES

#### 6.3.1. Programme of Postgraduate Study in Sociology

The Department of Sociology of the University Crete organises a Programme of Postgraduate Study in Sociology; it awards:

- Master of Science (MSc) in Sociology following a twoyear course of study, with the following areas of concentration:
  - Social Organisation and Social Change
  - Culture: Social Practice and Conflict
- Doctoral degree in Sociology

The Postgraduate Programme in Sociology operates since the academic year 2003-2004, according to Greek Law 2083/1992, articles 10-12, and the provisions published in the official Journal of the Hellenic Republic 1133/27-7-04.

The programme's objectives are: to educate and train social scientists in the broader field of Sociology and to facilitate the sociological understanding of social differentiations and inequalities that occur in the context of a changing and globalizing economic, cultural, political, and social life. It's ultimate aim is to contribute to the promotion of sociological research in Greece and Europe,

and through this to the strengthening and qualitative upgrading of employment.

# **6.3.2.** Interdepartmental and interdisciplinary postgraduate programmes

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

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

## **6.4 FACULTY MEMBERS**

#### **Professors**

 Kousis, Maria, Ph.D., 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

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

 Papaioannou, Skevos, Dr., 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, Doctorat, 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

Papageorgiou, Yota, Ph.D., Florida State University.
 Research interests: Methods of the Social Sciences (qualitative and quantitative); women studies (comparative fenimism); political sociology (groups vs the state); comparative political cultures.

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

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

Research interests: Political sociology and the modernization / Europeanization of the modern Greek state and society; the Greek and European information society and social informatics; surveillance and security in Greece and EU. e-mail: samatas@social.soc.uoc.gr, Tel: 0030 28310 77488

#### Assistant Professors

 Aheimastos, Myron, Doctorat, 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 77481

• Fournaraki, Eleni, Doctorat, 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., 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."

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

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 Research interests: Sociological theory; political theory; epistemology and the methodology of social science.
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 Serdedakis, Nikos, Doctoral degree, University of Crete.

Research interests: Sociology of collective action, social movements, political violence.

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 Research interests: Urban subcultures, local and multicultural societies, social exclusion and minorities and sociology of leisure and youth.

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• Zambarloukou, Stella, Ph.D., 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 77478

#### Lecturers

0030 28310 77473

• Giannissopoulou, Maria, Doctorat, 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:

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Konstantinidou, Christina, Doctoral degree, Panteion University.

Research interests: Sociology in mass media, social semiotics, gender studies, sociology of work, analysis of the

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 Markou, Katerina, Doctorat, dissertation in Social and Historical Anthropology, Ecole des Hautes Etudes en Sciences Sociales, Paris.

Research interests: Minorities and islam in the Balkans, nationalism and identity politics, methodological questions in ethnographic research, migration in balkan societies, sociolinguistics, socio-anthropology of space.

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 Petoussi, Vassiliki, Ph.D., 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.

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# Specialized Teaching Staff

• Havredaki, Irene, Ph.D. in English Language and Literature, University of Connecticut at Storrs.

Research interests: English for sociologists, English literature, English for scientific writing.

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# Specialized Technical and Laboratory Personnel

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- Papadaki, Marina, Specialized Technical and Laboratory Personnel

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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 language 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, is organized since 1994 and focuses on sociological theory and qualitative methods. Its goal is to assist Ph.D. students to review aspects of their research in small groups. Visiting Professors and regular members of staff are lecturing on plenary sessions.



The second summer school programme, directed by Andreas Moschonas' Jean Monnet Chair, concentrates upon european topics with an explicit European Union theme each year. Several publications have resulted from the work carried out within these two programmes.

## **6.6 RESEARCH UNITS**

A. Laboratory: "Social Analysis and Applied Social Research"
B. Laboratory: "Gender in Social Sciences"

# **6.7 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 permanent 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. The Jean Monnet programme is using the European Documentation Centre at the Library of University of Crete, and the computer center of the Faculty of Social Sciences.



# 7. DEPARTMENT OF ECONOMICS

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Head of the Department: Professor Emmanuel Petrakis

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Departmental Secretariat

Tel: 0030 28310 77405/6, 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 850 undergraduate students and 30 postgraduate students enrolled in the Department, while more than 999 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. Departmental Regulations and Program of Studies

At the beginning of the academic year, the courses which will be offered in the Winter and Spring semesters are specified.

#### I. Enrollment in Courses

During each of the first 6 semesters of study, a student has the right to enroll in from 4 to 7 courses, including the foreign language course.

In the fourth year of studies, a student may declare as many as 9 courses per semester, including the foreign language course. In the eighth semester of studies, a student is required to enroll in, and receive a passing grade in, at least one course.

Each semester course is taught 3 hours per week and is equivalent to 3 teaching credits.

#### 2. Structure of the Program of Studies

#### I. General

In order to obtain a degree, students must pass 48 courses, of which:

- 44 are courses of general content
- 4 are courses in English

The grades in the 4 English courses are averaged and counted as one grade.

The grade point average for the degree is the average of 45

courses (the 44 general content lessons plus the 1 grade in English).

#### II. General Structure

The Program of Studies includes:

- a. Core courses
- b. Courses from Specializations
- c. General Courses of the Department
- d. English courses
- e. Courses from Other Departments

# III. Basic Compulsory Courses (C)

Core	4
Specializations	6
English	4
Total	24

# IV. Required Selections (RS) from Specializations and Electives (E)

## a. Required Selections from Specializations

In order to ensure exposure to a wide range of economics topics, students are required to pass a minimum of 5 courses in each of the Department's three areas of Specialization. Two of these 5 courses (for each Specialization) must be chosen from a group of Required Selections (RS) for each Specialization and are included in the Department's compulsory courses (C). In order to complete the minimum required number of courses in the Specializations, students must select an additional 3 courses from each Specialization.

# b. Courses from Other Departments

Students may select a maximum of 8 courses from other Departments, provided that these courses are approved by the Department.

# c. Electives from the Department

The remaining courses needed to reach a total of 48 are selected from the Department's electives (E).

# V. Specialization

In order to fulfill the requirements needed to acquire a Specialization in the Department, a student must take 10 courses from a specific Specialization:

- the 5 Required Selections (RS) for the chosen Specialization
- any 5 additional Elective (E) courses from the chosen Specialization

### **INDICATIVE PROGRAMS OF STUDIES**

### **GENERAL PROGRAM**

48	Total
15 - 9	Electives from the Department
0 - 6	Courses from Other Departments
9	Courses from Specializations*
24	Basic Compulsory Courses

\*Students must take at least 5 courses from each Specialization. Two courses from each Specialization are included in the Basic Compulsory Courses, while the other 3 should be chosen from the RS or E courses offered in each Specialization.

## PROGRAM LEADING TO A SPECIALIZATION

48	Total		
10 - 4	Electives from the Department		
0 - 6	Courses from Other Departments		
	Specializations**		
6	Courses from remaining two		
8	Courses from chosen Specializations*		
24	Basic Compulsory Courses		

\*Students must take a total of 10 courses from the chosen

Specialization: 2 are included in the Basic Compulsory Courses (C), leaving an additional 8 of which 3 must be Required Selections (RS) from the Specialization and 5 are Electives (E) from the Specialization.

\*\*Students must take 5 courses from each of the remaining Specializations: 2 from each Specialization are included in the C, leaving an additional 6 which can be either RS or E within the given Specialization.

#### PROGRAM LEADING TO TWO SPECIALIZATIONS

24	Basic Compulsory Courses
16	Courses from two chosen Specializations*
3	Courses from remaining Specialization**
0 - 5	Courses from Other Departments
5 - 0	Electives from the Department
48	Total

\*Students must take 10 courses from each of the two chosen Specializations: 4 are included in the C, leaving an additional 16 of which 6 (3+3) must be RS from the two chosen Specializations and 10 (5+5) must be E from the given Specializations.

\*\*Students must take 5 courses from the remaining Specialization: 2 are included in the C, leaving an additional 3 which can be either RS or E within the Specialization.

If two additional compulsory courses, Computers I and Computers II, are added, then the Basic Compulsory Courses will increase from 22 to 24, and the Courses from Other Departments or Electives from the Department will decrease by 2.

#### 3. Additional Information

#### a. Lectures

Most of the courses offered by the Department are lectures courses.

Foreign language courses

The Department offers four compulsory courses in "English for Economists". By the end of their studies, students must have learned the English language well enough to be able to understand English bibliography in Economics. The foreign language course is taught three hours per week, for four progressive semester courses which correspond to levels I, II, III, IV.

A written placement test is administered to all first-year students at the beginning of each academic year. Students who receive a grade from 8 to 10 pass the level I English course with the grade from the placement test and are placed in the level II English course. These students complete three semesters of English. Students who receive a grade below 8 on the placement test are placed in level I and complete four semesters of English. First-year students who do not take the placement test are automatically placed in level I.

Students, who are placed in level II and wish to apply for a total exemption from the English requirement, should submit an application to the Department Secretariat within one week after the announcement of the results of the placement test. The examination will be conducted by a committee which consists of an English language instructor and another member of the academic staff. The committee can propose to the Department that the student be given a total exemption in the foreign course and give him/her a grade in the course.

#### b. Seminars

Certain courses are offered in the form of Seminars. Each student, in order to graduate, must pass a minimum of 3 seminars. No more than 2 seminars can be taken in any given semester.

Seminars are open to students who have reached at least the fifth semester of studies. The maximum number of students that can enroll in a seminar is 15. The way in which students are selected for any given seminar is determined by the instructor. Questions regarding selection of students for seminars should be directed first to the Program of Studies Committee, and - in the event that the question can not be answered at this level - to the General Assembly of the Department.

# c. Courses from other Departments of the University of Crete

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 during studies\*

Political Science Department	8
Sociology Department	8
Psychology Department	2
Department of Primary Education	2
Faculty of Philosophy	8
Faculty of Sciences and Engineering	8
*Nlata, Ctudanta da nat hava tha night to tale	

\*Note: Students do not have the right to take courses on quantitative methods from other Departments of the University of Crete in Rethymno. Courses chosen from other Departments cannot include English language courses, seminars or field work courses.

Courses from other Departments of the University during the first two years of study

The maximum number of courses that can be chosen from other Departments or Faculties of the University of Crete during the first two years of study is 5:

# Department / Faculty Maximum number of courses that can be chosen during the first two years of studies

Political Science Department	5
Sociology Department	5
Psychology Department	2
Department of Primary Education	2
Faculty of Philosophy	5
Faculty of Sciences and Engineering	5

Courses from other Departments of the University during the last two years of study

During the last two years of study, students can select courses from other Departments or Faculties of the University of Crete to reach a maximum of 8, subject to the restrictions noted above.

#### 4 Examinations

Written examinations are held at the end of the Winter semester (in January-February), and at the end of the Spring semester (in June). During a third examination period in September, students may write examinations for courses in which they were enrolled in the preceding Winter and/or Spring semesters.

# 5. Re-grading

In the fourth year of studies, a student has the ability to be re-graded in a maximum of three courses (which are not counted in the number of courses in which the student is allowed to enroll for the given semester).

# 6. Student Internships

The department provides the opportunity for a limited number of students to work at banking and other institutions for short periods of time. These internships are optional and do not count toward the degree nor are they written on the transcript.

## e. List of Courses Offered by the Department

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C: Compulsory

E: Elective

**RS:** Required Selection

S: Seminar

# I. Core Courses (Compulsory)

- I. Macroeconomic Theory I (C)
- 2. Macroeconomic Theory II (C)
- 3. Macroeconomic Theory III (C)
- 4. Microeconomic Theory I (C)
- 5. Microeconomic Theory II (C)
- 6. Microeconomic Theory III (C)
- 7. Econometrics I (C)
- 8. Econometrics II (C)
- 9. Statistics I (C)
- 10. Statistics II (C)
- II. Mathematics I (C)
- 12. Mathematics II (C)
- 13. Computers I (C)
- 14. Computers II (C)

# II. General Courses of the Department

- I. Institutions of the European Union (E)
- 2. Elements of Civil and Commercial Law (E)
- 3. Mathematics III (E)
- 4. Econometrics III (E)
- 5. Statistics III (E)
- 6. Special Issues in Econometrics (E)

# III. Foreign Language

- I. English for Economists I (C)
- 2. English for Economists II (C)
- 3. English for Economists III(C)
- 4. English for Economists IV (C)
- 5. Advanced English (E)

The grade in English that is used for the degree is calculated as the average of the grades in English I - IV. Advanced English is an independent lesson.

# IV. Courses from Specializations

- All students must choose at least 5 courses from each Specialization in order to cover the minimum requirements of the General Program. Two of these 5 must be chosen from the Required Selections (RS) from each Specialization.
- Students who wish to acquire a Specialization are required to complete at least 10 courses in their chosen Specialization, including all 5 of the RS for that Specialization, along with any other 5 E courses from that Specialization.

# Specialization 1: ECONOMIC THEORY AND POLICY REQUIRED SELECTIONS

- I. Public Economics I (RS)
- 2. Theory of International Trade (RS)
- 3. Monetary Theory I (RS)
- 4. Economic Growth I (RS)
- 5. Greek Economy I (RS)

# Courses on Advanced Economic Theory and Economic Policy

Advanced Microeconomic Theory (E)

Advanced Macroeconomic Theory (E)

Public Economics II (E)

Game Theory (E)

Monetary Theory II (E)

Economic Growth II (E)

Greek Economy II (S) (E)

Labor Economics (E)

Input-Output Analysis (S) (E)

Economic Indicators and National Accounts (E)

Health Economics (E)

# **Courses on Agricultural Policy and Natural Resources**

Agricultural Economics and Policy I (E)

Agricultural Economics and Policy II (E)

Environmental and Natural Resources Economics (E)

**Energy Economics (E)** 

Management of Renewable Resources (E)

Assessment of Environmental Preferences (S) (E)

Environment and Development (S) (E)

# **Specialization 2: BUSINESS ECONOMICS**

REQUIRED SELECTIONS

- I. Finance I (RS)
- 2. Economics of the Firm (RS)
- 3. Industrial Organization (RS)
- 4. Economics of Technology and Innovation (RS)
- 5. Strategic Management (RS)

#### **Courses on Finance**

Banking (E)

Corporate Finance (E)

Financial Accounting I (E)

Financial Accounting II (E)

Investment Appraisal (E)

Finance II (S) (E)

International Finance (S) (E)

# Courses on Organization and Policy of the Industrial Sectors

Labor Unions and Labor Markets (E)

Corporate Governance (E)

Competition Policy (E)

Economics of Tourism (E)

Maritime Economics (E)

Multinational Corporations and Foreign Investment (E)

Industrial Organization and Competition Policy (S) (E)

Strategy of the Firm and Entrepreneurial Policy (S) (E)

Sectoral and Labor Relations (S) (E)

# **Courses on Business Administration**

Strategic Marketing (E)

Decision Theory and Operational Research (E)

Human Resources Management (E)

Organization and Management of Firms and Organizations (E)

E-business (S) (E)

Entrepreneurship: Conception and Development of a

Corporate Idea (S) (E)

# Specialization 3: POLITICAL ECONOMY AND ECONOMIC DEVELOPMENT

#### REQUIRED SELECTIONS

- I. Political Economy I (RS)
- 2. History of Economic Thought I (RS)
- 3. Greek Economic History I (RS)
- 4. Marxist Economic Theory I (RS)

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# 5. Economic Development I (RS)

# **Courses on Political Economy**

Political Economy II (E)

History of Economic Thought II (E)

Marxist Economic Theory II (E)

Methodology of Economic Science (S) (E)

Special Issues in Political Economics (S) (E)

Ecological Economics (E)

# Courses on International and European Political Economy

International Political Economy I (E)

European Economic Integration I (E)

European Economic Integration II (S) (E)

European Community Law (E)

Theories of European Integration (E)

International Political Economy II (S) (E)

# Courses on Economic Development and Economic History

Greek Economic History II (E)

Economic Development II (E)

Economic Geography (E)

Regional Economics and Development (E)

Sustainable Development (E)

Political Economy of the Agricultural Sector I (E)

Political Economy of the Agricultural Sector II (S) (E)

European Economic History I (E)

European Economic History II (E)

#### 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 from the members of staff teaching in the postgraduate programme as well as a two-person examining committee composed of one member of teaching staff 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 April/May and November/December, 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**

Kanas, Angelos, (pending appointment), Ph.D.,
 University of Aston in Birmingham.

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

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 Kardasis, Vassilis, Doctoral Degree, National and Kapodistrian University of Athens.

Research interests: Economic history.

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 Lekakis, Joseph, Ph.D., University of Michigan, Ann Arbor.

Research interests: Economics of environment and natural resources: microeconomics.

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Papadopoulos, Athanasios, Ph.D., University of Salford.
 Research interests: Monetary Theory and Policy,
 Macroeconomics, Macroeconometrics.

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 Petrakis, Emmanuel, Ph.D., University of California at Los Angeles.

Research interests: Industrial Organization Theory and Policy; Game Theory and Bargaining Theory; Environmental Economics; International Trade Theory; Labour Economics and Political Economy of Institutions; Digital Economy issues and Internet Economics.

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 Stathakis, George, (pending appointment), Ph.D., 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

• Xepapadeas, Anastasios, Ph.D, University of Manchester. Research interests: Environmental and Resource Economics, Economic Growth, Sustainability, Dynamical Systems, Water Management, Spatial Analysis and Diffusion, Uncertainty, Evolutionary Games.

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#### **Associate Professors**

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

Research interests: Comparative Economic (schools of thought), Political Economy of Institutions, Comparative Economic Systems, History of Economic Thought, Economic Theory and History, Philosophy and Methodology of Economics.

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• Tserkezos, Dikeos, Doctoral degree, University of Piraeus. Research interests: Econometrics; statistics; time series analysis.

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#### Assistant Professors

Kalaitzidakis, Pandelis, Ph.D., Columbia University.
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- Nikolaidis, Vangelis, Dr., Szent Istvan University, Godollo. Research interests: Political economy of agriculture; agricultural development; agriculture and environment. e-mail: nikolaidis@econ.soc.uoc.gr, Tel: 0030 28310 77424
- Pesmazoglou, Vassilis, Doctoral degree, Panteion University, Athens.

Research interests: European integration; globalisation and international political economy.

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

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

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#### Lecturers

• Genius, Margarita, Ph.D., University of California San Diego.

Research interests: Theoretical and applied econometries; environmental econometries.

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Tsiotas, George, Ph.D., University of Essex.
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## Specialized Teaching Staff

· Drakos, Periklis, M.Sc. in Applied Statistics,

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 Papaioannou, Evgenia, M.A. in Linguistics, University of Reading.

Research interests: English for economists; English for psychologists.

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Stefan, Joan, M.A. in Education, San Jose State University.
 Research interests: English for economists; computer-assisted language learning.

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# Specialized Technical Personnel

 Pigounakis, Kostas, Doctoral degree, National Technical University of Athens.

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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 and free of charge wireless LAN access for the department. 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).

September 2004: The annual meeting of European Association of Agricultural Economists (EAAE).

October 2004: The annual conference of European Association For Evolutionary Political Economy (EAEPE). July 2005: International Conference on Water Economics, Statistics (IWA).

October 2005: The annual conference of the Association of Southern European Economic Theorists (ASSET).

August 2006: Advanced Summer School in Economics and Econometrics on "Panel Data Econometrics".

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
- o public administration
- o business firms



# 8. DEPARTMENT OF PSYCHOLOGY

website: www.soc.uoc.gr/psycho, e-mail: n\_chronopoulou@psy.soc.uoc.gr

Head of the Department: Professor George Galanis

e-mail: galanis@psy.soc.uoc.gr, Tel: 0030 28310 77943

Departmental Secretariat

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

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 a few kilometers outside the town of Rethymno. It was the first University-level Department of Psychology in Greece, established in 1984 and accepted its first students in 1987. The first class graduated from the Department of Psychology in 1991.

Currently the Department has approximately 600 undergraduate students and 19 Ph.D. candidates.

#### 8.2 UNDERGRADUATE STUDIES

# 8.2.1 Structure of the Program

The Department offers a Program of Studies in Psychology leading to a Bachelor's of Science degree (B.Sc.). The average period of time required to complete studies, is four academic years or eight semesters. Courses are offered on a semester basis: two (thirteen week) semesters per academic year, i.e. fall and spring semesters. Courses are divided into compulsory and optional courses and take the form of:

i) Lectures, ii) Seminars, iii) Laboratories, iv) Foreign Language, v) Internship, and vi) Senior Year Dissertation. For each of the above, there may be prerequisites.

To attain the Bachelor's degree, students must take and



pass 50 courses, of which, 28 are compulsory (plus four courses in foreign language), and 10 courses within students' specialization (major). The remaining courses are optional, of which, at least 6 must be seminar and/or laboratory courses. The Department complies with the European Community Course Credit Transfer System (ECTS).

The different types of courses offered by the Department 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 class presentation and finally, submit a term paper on that given theme. Seminar titles may change to meet the developing interests of study areas. Every seminar carries 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. Each laboratory carries three credit units.
- iv) Foreign Language is open to all students. In the Department of Psychology English is the only foreign language offered. All students must take an English Language

Placement Test, to determine individual level of English and be placed in an appropriate course. There are two courses offered in "English as a Foreign Language" (EFL), and three courses in "English for Specific Purpose (psychology)" (ESP). All courses focus on specific subject areas and issues within psychology. The compulsory number of foreign language courses is four, unless placement test results lead to an exemption from one EFL course. Each Foreign Language course carries three credit units. Students may

take French, German or any other foreign language offered by other Departments within the University.

- v) Internship is open only to 4th year students. In their final year of studies, students are required to do 200 hours of internship (during both academic semesters) in Applied Psychology. The Internship is carried out in various institutions (e.g. counseling centers, health facilities, psychiatric institutions, research centers, work centers, schools, hospitals etc.).
- 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 students' theoretical, methodological, research ability and in depth knowledge of the topic they have selected.

# 8.2.2 Undergraduate Courses

The undergraduate courses offered by the Department of Psychology, are listed below within thematic framework:

• Compulsory Courses:

I. Fundamental Principles of Psychology

History of Psychology

General Psychology I: Perception-Memory-Learning

General Psychology II: Language-Motives-Emotion-

Consciousness

Personality & Individual Differences

Cognitive Psychology

II. Methodology & Statistics

Research Methods in the Social Sciences

Statistics I

Statistics II

**Psychometrics** 

# III. Developmental & School Psychology

Developmental Psychology I: Infants & Toddlers

Developmental Psychology II: Childhood & Adolescence

**Educational Psychology** 

School Psychology I: Introduction to School Psychology School Psychology II: Psychology of Reading, Writing & Dyslexia

# IV. Biopsychology & Neurosciences

Introduction to Neurobiology & Genetics

Physiological Psychology I: Foundations of Physiological

Psychology & Sensory Systems

Physiological Psychology II: Motor & Regulatory Systems

Neuropsychology

# V. Social Psychology

Social Psychology I: Introduction to Social Psychology

Social Psychology II: Experimental Social Psychology

Social Psychology III: Applied Social Psychology

Political Psychology

Work Psychology & Counseling

# VI. Clinical & Health Psychology

Counseling Psychology

Childhood & Adolescent Psychopathology

Adult Psychopathology Health Psychology

Psychotherapeutic Processes

# VII. Foreign Language (English for Psychologists)

Introduction to Social Sciences and Psychology

Trends, Characteristics and Psychology of Greek Society Introduction to Developmental Psychology and Terminology Introduction to Clinical Psychology and Terminology Introduction to Neurobiology and Terminology

• Elective Courses:

I. Fundamental Principles of Psychology

Sensation & Perception

Philosophy & Epistemology of Psychology

Psychology of Motivation

Critical Psychology

Ethics & Standards of Professional Practice in Psychology

Personality Theories: Psychoanalytic Perspectives

# II. Methodology & Statistics

Special Topics in Research Methods: Quantitative Models

Research Methods in Consumer Behavior

# III. Developmental & School Psychology

Language Development

Play: Educational & Developmental Perspectives

Language Development & Disorders Pervasive Developmental Disorders

Development & Resilience in Adolescents

Functions of Memory & Speech in Preschool Age

# IV. Biopsychology & Neurosciences

Comparative Psychology

Biopsychology of Mental Disorders

Psychopharmacology of Addiction & Addictive Drugs

Neurochemistry of Behavior

Behavioral Genetics

Neuropsychopharmacology

# V.Social Psychology

Organizational/Work Psychology

Forensic Psychology Psychology & Law

Cross-Cultural Psychology

Communication and Media Psychology

Family and Gender Differences

## VI. Clinical & Health Psychology

Clinical Applications of Health Psychology

Community Psychology Family Systems Theory

Clinical Psychological Interventions for Children and

Adolescents with Chronic Disease

VII. Foreign Language

Advanced Academic English

VIII. Miscellaneous

130 Sport Psychology

Brain &Psyche

Psychoanalytic Theory

Psychology of Gender: Women

Neurobiological Background of Psychotherapy

# **Laboratories & Applied Courses**

Perception

Implicit Memory

Use of SPSS & Statistics

Psychological Assessment of Cognitive Functions in

Preschool Age

Assessment of Cognitive Skills (Introductory)

Assessing Reading & Spelling Ability or other Meta-

Cognitive Skills (Advanced)

Neuropsychological Assessment: Intelligence & Language

Neuropsychological Assessment: Memory & other

Cognitive Skills

Techniques & Basic Research Methods for the Study of

Brain & Behavior

Social-Psychological Perspectives on Emotion

Migrants in the Community

Social Exclusion & Psychology

Current Issues in Health Psychology

Schizophrenia

Projective Tests: Rorschach Test-Clinical Analysis

#### 8.3 FACULTY MEMBERS

#### **Professors**

• Galanis, George N., Dr., University of Hamburg.

Research interests: Social and Political Psychology; Criminology; Adults Education; Media; Minorities; Immigration and Multiculture.

e-mail: galanis@psy.soc.uoc.gr, Tel: 0030 28310 77543

• Nestoros, Joannis N., Ph.D., 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 states.

e-mail: nestoros@psy.soc.uoc.gr, Tel: 0030 28310 77527

• Rigas, Anastasia-Valentini, Doctorat, 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

## Associate Professors

Ekkekakis, Panteleimon, Ph.D., University of Illinois.
 Elected in Athletic Psychology, to be appointed in the near future.

Research interests: Movement and exercise physiology and psychology.

 Kastellakis, Andreas A., Doctoral degree, University of Patras.

Research interests: Interaction of dopaminergic system with other neuroactive-psychotropic substances (thyroid hormones, somatostatin, opiates, psychostimulants), biopsychology-psychopharmacology of addiction.

e-mail: kastellakis@psy.soc.uoc.gr, Tel: 0030 28310 77540

- Sideridis, Georgios D., Ph.D., University of Kansas. Research interests: Motivational and emotional aspects of learning disabilities. Achievement goal theory and its relation to achievement and psychopathology. Psychopathology in learning disabilities. Multilevel modeling and structural equation modeling analyses in educational psychology. e-mail: sideridis@psy.soc.uoc.gr, Tel: 0030 28310 77545, Fax: 0030 28310 77578
- Simos, Panagiotis G., Ph.D., Southern Illinois University. Research interests: Functional brain imaging of language, reading, and memory, and the neurobiological basis of developmental reading disability. Neuropsychology of developmental and acquired language, reading, and math difficulties.

e-mail: psimos@psy.soc.uoc.gr, Tel&Fax: 0030 28210 77537

#### **Assistant Professors**

 Dafermos, Manolis, Ph.D., Lomonosov Moscow State University.

Research interests: Scientific methodologies in psychology, consciousness and cognition; philosophical theories of consciousness; history of psychology; cultural psychology; and psychology and scientific creativity.

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

 Hatira, Kalliopi, Doctorat, University Louis Pasteur of Strasbourg.

Research interests: Clinical Health Psychoanalytic approach, Psychosomatic and somatoform disorders, Psychic trauma and pain: Psychoanalytic approach; Children and adolescents with fatal and chronic disease. e-mail: hatira@psy.soc.uoc.gr, Tel: 0030 28210 50377

• Karademas C. Evangelos, Doctoral degree, National and Kapodistrian University of Athens.

Research interests: Psychosocial factors and health,

cognitive representation of illness, stress and health, adaptation in the aftermath of a crisis. e-mail: karademas@psy.soc.uoc.gr, Tel: 003028310 77532

- Kafetsios, Konstantinos, Ph.D., Lancaster University. Research Interests:Interpersonal relationships with particular emphasis to individual differences in adult attachment organisation. Emotion and its communication in relationships. Emotion in organisational contexts. Social, relational and personality aspects of well-being. Links among intrapersonal, interpersonal, and social levels of analysis in social psychology. Event sampling methodologies. e-mail: K.Kafetsios@psy.soc.uoc.gr, Tel: 0030 28310 77534
- Kokkikaki, Theano, Ph.D., 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
- Panagis, George, Doctoral degree, 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
- Triliva, Sofia, Ph.D., 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

• Tsaousis, Ioannis, Ph.D., University of London. Elected in Psychometrics, to be appointed in the near future.

Research interests: Psychometric assessment with emphasis on personality traits.

#### Lecturers

- Giovazolias, Thodoros, Ph.D., University of Surrey. Research interests: Therapist-client relationship, power imbalance in the therapeutic process and other contexts, preventive/therapeutic interventions to drug and alcohol counselling, the exploration of bullying behaviour and its relationship with factors such as parenting styles, role of bystanders and personal characteristics of bullies/victims. e-mail: giovazolias@psy.soc.uoc.gr, Tel: 0030 28310 77520
- Mascha, Katerina, Ph.D., Warwick University. Research interests: Social and emotional development in children with special emphasis on interpersonal relationships in the family and at school. Children with special needs and their influence on their family. e-mail: kmascha@psy.soc.uoc.gr, Tel: 0030 28310 77717
- Nikolopoulos, Dimitris, Ph.D., 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

• Themeli, Olga, Doctoral degree, University of Athens. Research interests: Correctional psychology (mental health in prisons, suicides and self- injury among inmates, incarcerated mothers with their children in prison, children of imprisoned parents); Psychology and the court system (stress in and out of the courtroom, child witness testimony in court, suggestibility and accuracy of children's memory, impact of legal investigation on sexually abused children); Stalking.

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

 Vallianatou, Dionisia, Doctoral degree, 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 psychology, such as the event-related potentials (ERPs). e-mail: vallianatou@psy.soc.uoc.gr, Tel: 0030 08310 77529

# Specialized Teaching Staff

 Kondoroussi-Karageorge, Anna, M.Sc. 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, M.A. 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

website: www.soc.uoc.gr/political/index.htm, e-mail: politiki\_epistimi@pol.soc.uoc.gr

Head of the Department: Professor Stelios Chiotakis

e-mail: chiotakis@pol.soc.uoc.gr, Tel: 0030 38310 77559

Departmental Secretariat

Tel: 0030 28310 77450/2, Fax: 0030 28310 77455

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 432, while the Department also has 19 Doctoral students.

#### 9.2 UNDERGRADUATE STUDIES

# 9.2.1 Structure of the Program

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, which may lead to an optional senior thesis 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.

## 9.2.2 Undergraduate Courses

The undergraduate courses offered by the Department of Political Science, are listed below within thematic framework:

# Compulsory Courses:

English for Political Scientists A

# Ist Semester:

Introduction to Political Science I - Conceptual Foundations
Political Theory I
Modern European History
Introduction to Greek Politics
Introduction to Methodology of Political Science
Qualitative Methods in Social & Political Research

# 2nd Semester:

Introduction to Political Science II - International Parameters
Political Theory II
Descriptive Statistics
The Political System of the European Union
Introduction to Comparative Political Analysis
English for Political Scientists B

# 3nd Semester:

Political Theory III Interest Groups Collective Action and Political Change English for Political Scientists C

## 4nd Semester:

Political Theory IV: International Theory Public Policy and the State Political Parties English for Political Scientists D • Elective Courses:

Autumn Semester:

Euro-Mediterranean Relations

International Theory and the European Union

Determinative Factors of the Electoral Behaviour and

Research Methods in the Electorate Research

The Greek Political Parties in the Aftermath Period of

Political Change

Interests' Intermediation and Industrial Relations

State and Social Theory

New forms of threats in the contemporary international

system

The Human Rights in the International Politics: The

evolution of humanitarian and war law

Inferential Statistics

Political Economy of Public Policies

Political Sociology: Theories on the economic prerequisites

of Democracy

**Spring Semester:** 

The Political System of the United States

Political Economy

Political Economy and Political Theory

Political Communication

Germany: Political System and International Profile

History and Ideology in Social Theory

Civil Society: Current Perspectives

Europe and the Modern World

Relations between the University and the Free Professions

Contemporary Greek Foreign Policy

The Cyprus Political System and the structure of the

**Political Parties** 

Minorities and Greek Policy

Aspects of the political and institutional mondernization:

Political Parties in the middlewar

• Elective Seminars:

Autumn Semester:

Special Topics of Public Policy Analysis

Monitoring the Implementation of European Policies

State and Local Politics

Politics and Property in the Age of Imperialism

Issues in Social Theory: Karl Marx and Max Weber

Contemporary Issues in International Relations

Issues in Democratic Governance

Issues in Social Theory

The Methodology of Max Weber and Political Theory

Co-operation and Security in Southeastern Europe

State and Human Rights

Issues in Greek Politics

Power, Sexuality and Knowledge

Public Administration and Policies

Statistical procedures using SPSS and LISREL

**Spring Semester:** 

State and Economic Regulation

Issues in State Theory

Political Communication of Pressure Groups

Issues in Political Theory: Hegel

Religion and Political Theory

Policies in Education, Training and Employment

The concept of Multiculturalism through the Prisms of

Communitarianism and Civil Society

**Electoral Systems and Political Process** 

Political Systems in Southeastern Europe

Mediterranean Security Issues

Constitution and Revision

Analysis of Political Discourse

Issues in Social Theory: Karl Marx and Max Weber II

#### 9.3 GRADUATE STUDIES

In 2004 the Department organized its Graduate Programme, which now includes a Master's Degree on 'Political Analysis and Political Theory', with specializations in Political Theory and Rights, Political Analysis of Public and European Policies, and Political Culture and Sociology of Politics. The Department also offers a Doctoral programme in Political Science. The aim of the Graduate Programme is to achieve excellence in the field of Political Science and to offer students the highest academic standards.

#### 9.4 FACULTY MEMBERS

# **Professors**

 Chiotakis, Stelios, Dr., Wolfgan - Goehte Universitaet, Frankfurt/M.

Research interests: sociology of education and sociology of professions; multiculturalism - minorities; terrorism; political theory; Max Weber.

e-mail: chiotakis@pol.soc.uoc.gr, Tel: 0030 28310 77559

• Gravaris, Dionyssis (appointment pending), Doctoral degree, Panteion University.

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

e-mail: gravaris@social.soc.uoc.gr, Tel: 0030 28310 77449

 Kotroyannos, Dimitris, Doctorat, University of Strasbourg.

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

e-mail: kotroyannos@pol.soc.uoc.gr, Tel: 0030 28310 77454

• Lavdas, Kostas A. (appointment pending), The Constantine Karamanlis Professor of Hellenic and European Studies, Tufts University, USA, (Vice Rector for Academic Affairs and Personnel 2004-2006), Ph.D., University of Manchester. Research interests: Comparative politics; interest groups; European Union; applied political theory.

e-mail: lavdas@pol.soc.uoc.gr, Tel: 0030 28310 77560

#### Associate Professors

• Chryssochoou, Dimitris N., Ph.D., University of Reading. Research interests: International theory; European Union; democratic theory; comparative federalism. e-mail: chryssochoou@pol.soc.uoc.gr, Tel: 0030 28310 77558

- Giouras, Thanassis (appointment pending), Dr., Wolfgan
- Goehte Universitaet, Frankfurt/M.

Research interests: Classical political theory; fiscal theory and policy from the perspective of a theory of the state; literature and politics.

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

- Mendrinou, Maria M., Ph.D., University of Manchester. Research interests: Public policy; policy implementation; European Union; comparative electoral politics. e-mail: mendrim@pol.soc.uoc.gr, Tel: 0030 28310 77453
- Papadakis, Nikolaos (appointment pending), Doctoral degree, University of Crete.

Research interests: Educational policy; public policy in comparative perspective, university politics, qualitative methods in social and political research.

e-mail: nep@pol.soc.uoc.gr, Tel: 0030 28310 77561

#### Assistant Professors

• Georgantas, Elias, Ph.D., University of Sussex. Research interests: Spatial development policies; local politics; urban and regional policy; state theory; economic regulation theory and regulation policy.

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e-mail: elgeo@pol.soc.uoc.gr, Tel: 0030 28310 77458

• Mavromoustakou, Ivi, Doctorat, 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 77562

#### Lecturers

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

Research interests: Comparative Politics and Neo-Institutional Analysis, Veto players in European Political Systems, Multi-level governance efficiency and legitimation in the EU Political System. The regulatory Role of the State. e-mail: alexopou@pol.soc.uoc.gr, Tel: 0030 28310 77461

Dafermos, Vasileios, Doctoral degree, University of Crete.
 Research interests: Statistical Analysis in Educational and Social Research.

e-mail: dafermos@pol.soc.uoc.gr, Tel: 0030 28310 77448

Noutsopoulos, Thomas, Doctoral degree, University of Ioannina.

Research interests: Political theory, history of political thought, classical theories of political economy. e-mail: noutsopt@pol.soc.uoc.gr, Tel: 0030 28310 77567

Vernardakis, Christoforos, Doctoral degree, University of Athens.

Research interests: Theories of Political Parties, Political Behavior, political and social research.

e-mail: vernardakis@pol.soc.uoc.gr, Tel: 0030 28310 77563

# Specialized Teaching Staff

 Hila, Marina, Ph.D. 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

# Honorary Doctorates

• Professor Philip Pettit, Princeton University, USA.

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

#### 9.5 RESEARCH

• Centre for Political Research and Documentation: Director: Professor Kostas A. Lavdas, Tel: 0030 28310 77560, e-mail: lavdas@pol.soc.uoc.gr.

The laboratory serves the academic and research needs of the Department of Political Science, as well as of other Department of the University of Crete, in issues related to gathering and processing political data at local, national and european level. The aims of the laboratory include the conduct and elaboration of research, the cooperation of any kind with research centres and academic institutes, the organization of scientific lectures, the rendering of services to other institutions.

Centre for Human Rights:

Director: Professor Dimitris Kotroyannos, Tel: 0030 28310 77454, e-mail: kotroyannos@pol.soc.uoc.gr.

The laboratory serves the academic and research needs in the field of human rights and the promotion of democratic patterns of polities. The centre parallel to its research activity, will have also an educational function. It is expected to operate as "Summer School" with realization of Intensive Programmes (IPs) which addresses to students from countries with recent experience in transition to democratic polities. These Intensive Programmes abut in consolidation procedures of collective rights and values.



# **FACULTY OF SCIENCES AND ENGINEERING**

# **DEPARTMENTS:**

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





# **Dean's Office**

Dean: Professor Suzana Papadopoulou Tel: 0030 2810 393201 E-mail: souzana@math.uoc.gr

Dean's Secretariat
Dean's Secretary: Ekaterini Tsalimi
Tel: 0030 2810 393200
Fax: 0030 2810 393202

E-mail: tsalimi@admin.uoc.g



# 10. DEPARTMENT OF MATHEMATICS

Website: www.math.uoc.gr, e-mail: inf@math.uoc.gr

Head of the Department: Assoc. Professor Michael Taroudakis

e-mail: taroud@math.uoc.gr, Tel: 0030 2810 393802, Fax: 0030 2810 234516

Departmental Secretariat

Tel: 0030 2810 393801, Fax: 0030 2810 393881

Departmental Secretary: Marina Chourdaki

# **10.1 BACKGROUND OF THE DEPARTMENT**

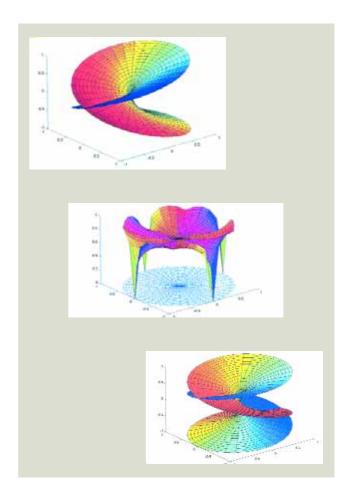
Since its foundation in 1977, the Department of Mathematics has functioned in a way unique among other Greek Departments of Mathematics. A basic characteristic of the Department is the flexibility of the Programme of Studies, which offers students a wide variety of choices among courses related to different 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 30 years, the Department has 26 tenure track faculty members, 8 visiting professors, 60 postgraduate students and about 600 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.

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 "Problems Workshop", 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 Doctoral degree. So far, the Department has awarded 44 M.A. degrees and 18 Doctoral degrees. The standards for awarding postgraduate degrees are high by international standards, especially those for a Doctoral degree.

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**

 Alexopoulos, Georgios (Division of Analysis), Doctorat, Université Pierre et Marie Curie (Paris I).

Research interests: Analysis.

Antoniadis, Jannis (Division of Geometry and Algebra),
 Dr., University of Cologne.

Research interests: Number Theory; Cryptography. e-mail: antoniad@math.uoc.gr, Tel: 0030 2810 393802

• Callias, Constantine (Division of Applied Mathematics and Statistics), Ph.D., M.I.T.

Research interests: Mathematical Physics. e-mail: callias@math.uoc.gr, Tel: 0030 2810 393889

 Kolountzakis, Mihalis (Division of Analysis), Ph.D., Stanford University.

Research interests: Harmonic Analysis; Combinatorial Problems; Computation.

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 Lambrou, Michael (Division of Analysis), Ph.D., King's College, University of London.

Research interests: Functional Analysis. e-mail: lambrou@math.uoc.gr, Tel: 0030 2810 393829

 Papadopoulou, Souzana (Division of Analysis), Doctoral degree, National and Kapodistrian University of Athens.
 Research interests: Functional Analysis; Convexity.
 e-mail: souzana@math.uoc.gr, Tel: 0030 2810 393201

- Tertikas, Achilles (Division of Applied Mathematics and Statistics), Ph.D., Herriott Watt University.
   Research interests: Partial Differential Equations.
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- Tzanakis, Nikos (Division of Geometry and Algebra),
   Doctoral degree, National and Kapodistrian University of Athens.

Research interests: Number theory (Explicit Solution of Diophantine Equations).

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 Pheidas, Anastasios (Division of Analysis), Ph.D., Purdue University.

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## Associate Professors

 Athanasopoulos, Constantine (Division of Geometry and Algebra), Doctoral degree, National and Kapodistrian University of Athens.

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Dais, Dimitrios (Division of Geometry and Algebra),
 Dr., University of Bonn.

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- Katsoprinakis, Emmanuil (Division of Analysis),
   Doctoral degree, University of Crete.
   Research interests: Harmonic Analysis; Complex Variables.
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- Klonias, Vassilis (Division of Applied Mathematics and Statistics), Ph.D., University of Rochester.

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- Kossioris, Georgios (Division of Applied Mathematics and Statistics), Ph.D., Brown University.
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- Kouvidakis, Alexandros (Division of Geometry and Algebra), Ph.D., Harvard University.
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- Pamfilos, Paris (Division of Geometry and Algebra),
   Dr., University of Cologne.
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- Papadimitrakis, Mihalis (Division of Analysis), Ph.D., University of California.

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 Tersenov, Alkis (Division of Applied Mathematics and Statistics), Dr., University of Novosibirsk.
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## **Assistant Professors**

· Garefalakis, Theodoulos (Division of Applied

Mathematics and Statistics), Ph.D., University of Toronto. Research interests: Computational Number Theory, Cryptography.

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- Zouraris, Georgios (Division of Applied Mathematics and Statistics), Doctoral degree, Polytechnic University of Crete.
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- Kourouniotis, Christos (Division of Geometry and Algebra), Ph.D., King's College, University of London.
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- Lydakis, Manos (Division of Geometry and Algebra), Ph.D., Brown University.
   Research interests: Homotopy Theory, K. Theory.
   e-mail: mlydakis@math.uoc.gr, Tel: 0030 2810 393826
- Mitsis, Themistokles (Division of Analysis), Ph.D., California Institute of Technology, Pasadena, California.
   Research interests: Harmonic Analysis, Geometric Measure Theory.

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• Skandalis, Constantine (Division of Analysis), Dr., University of Wroslaw.

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# Lecturers

 Kritikou, Doukissa (Division of Applied Mathematics and Statistics), Doctorat, University of Rouen.

Research interests: Statistics.

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#### **Emeriti**

- Apostolos Hadjidimos, Professor Emeritus Research interests: Numerical Analysis.
- Ioannis Papadakis, Professor Emeritus Research interests: Differential Equations.
- Nicholas Petridis, Professor Emeritus Research interests: Geometry.

## Honorary Doctorates

- Nikolaos Kritikos, Technical University of Athens, Date awarded: 11/5/1985
- Joseph B. Keller, Stanford University, Date awarded: 22/3/1993
- Leif Bjorno, Technical University of Denmark, Date awarded: 30/9/1996
- Constantine Dafermos, Brown University, Date awarded: 22/6/2001

Among its permanent personnel the Department also has Specialized Technical Staff who support its teaching and research activities. In addition the Department employs visiting lecturers 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. Bjorno (Lyngby), A. Pelczynski (Warsaw), and R. Schneider (Freiburg), S. Garouphalides (Georgia), P. Gruber (Wien), H. Brezis (Paris, Rutgers) and M. Waldschmidt (Paris), G. vam der Geer (Amsterdam), M. Lacey (Georgia, USA).

## **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 computer laboratories with a seating capacity of 50 in total, 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 access to more than 25,000 printed books in the fields of Mathematics, Computer

Science, Physics, Chemistry and Biology. It subsribes to 628 scientific journals and has electronic access to several thousand as well as information resources, a reserved collection of books, and electronic resource materials.

# 10.7 ADDITIONAL ACTIVITIES

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.

The recently opened sports hall and swimming pool of the University will give 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

Those students of the Department who wish, may 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 study conducted among the graduates of the period 1981-1997, it was estimated that about 60% were employed 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 but the most recent of the 26 Doctorates of the Department have found employment in research or teaching, either in regular or in visiting position.

## 11. DEPARTMENT OF PHYSICS

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Head of the Department: Professor Giorgos Tsironis

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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 admitted its first undergraduate students in 1978. Today it numbers 31 faculty members and about 25 scientists in visiting or project-funded positions; it has about 850 undergraduate students and 82 postgraduate students. Housed in temporary buildings near Knossos during its first years of operation, the Department moved to its permanent campus in 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 active research in the following fields:

- o High Energy Physics and Cosmology
- o Atomic, molecular and optical 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); It has also established collaborative research links with several other major research centers in Europe and overseas.



### 11.2 UNDERGRADUATE STUDIES

About eighty students enter the undergraduate programme every year. The eight-semester is divided into three stages:

Introductory stage: (3 semesters) Introductory courses in Physics and Mathematics, laboratory courses in Physics and Computers, and foreign language for Physics courses.

<u>Fundamental stage</u>: (3 semesters) Basic courses aimed at a deeper understanding basic physics subjects such as Classical Mechanics, Electrodynamics, Thermodynamics, Statistical Physics, and Quantum Physics, Laboratory courses.

Advanced stage: (2 semesters) The student applies the basic knowledge acquired so far in various fields of modern physics and technology, and comes in further contact with physics research laboratories.

A wide variety of optional courses offer students the opportunity to specialise in Microelectronics, Optoelectronics and Lasers, Applied and Computational Science, Astronomy and Physics Education.

## 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 Doctoral levels:

- Postgraduate Studies in basic Physics (started in 1984)
- Postgraduate Studies in Microelectronics and Optoelectronics (started in 1998)

Postgraduate students are solicited among the best graduating students of the leading Greek universities. They are admitted once a year on the basis of their undergraduate record, CV and 3 letters of reccomandation.

## 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 graduate 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:

Core curriculum: to equip students with a deep 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 equip the students with the necessary knowledge for specialization and research independent 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 others. More than 130 graduate students have been awarded a PDS thus far.

## b. Doctoral Degree

This is a programme of supervised research work (2-4 years) within a research group in the Department, eventually combined with some specialty courses, which lead to the Doctoral Degree. Students wishing to follow this programme have to successfully pass the Graduate Qualifying Exams, offered once or twice a year. To date, 53 postgraduate students have been awarded a Doctoral Degree.

Postgraduate studies in Physics are supported by an up-to-date library, direct access to the major electronic data bases and state of the art. Students interested in observational Astrophysics benefit from the activities at Skinakas Observatory. Nearly all postgraduate students are supported by a teaching or research assistantship or fellowship.

# **II.3.2 Postgraduate Studies in Microelectronics- Optoelectronics**

The programme was initiated in 1998 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 provided by the state of the art 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 at IESL-FORTH is active in many further 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. Dozen of several 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 them very interesting job opportunities, as witnessed by several success stories.

The M.Sc. curriculum includes two or three semesters of postgraduate classroom, lab and reading courses as well the preparation of M.Sc. dissertation. Doctoral candidates must hold an M.Sc. degree in Physics or other discipline

related to Microelectronics and Optoelectronics, such as Electrical Engineering and Materials Science. Doctoral candidates must also successfully pass the Graduate Qualifying Exams of the programme. In the first four years of operation of the programme, 62 M.Sc. and 12 Doctoral degrees were awarded.

## 11.4 FACULTY MEMBERS

### **Professors**

- Charalambidis, Dimitris (Atomic and Molecular Physics Division), Dr., 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
- Economou, Eleftherios (Condensed Matter Division), Ph.D., University of Chicago.

Research interests: Wave propagation in ordered and disordered media.

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 Fotakis, Costas (Atomic and Molecular Division), Ph.D., University of Edinburgh.

Research interests: Laser photophysics; laser interactions with materials.

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• Kelires, Pantelis (Condensed Matter Division), Ph.D., State University of New York at Albany.

Research interests: Computational condensed matter physics; semiconductors.

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· Kiritsis, Elias (High Energy and Elementary Particle Physics Division), Ph.D., 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., University of Illinois, at Urbana -Champaign.

Research interests: Theoretical astrophysics: compact Xray sources, galaxies, masers, radiation transport. e-mail: kylafis@physics.uoc.gr, Tel: 0030 2810 394215

- Papamastorakis, Giannis (Astrophysics and Space Physics Division), Dr., Technische Universität München. Research interests: Space physics and astrophysics. e-mail: apamast@physics.uoc.gr, Tel: 0030 2810 394211
- Papanicolaou, Nikos (High Energy and Elementary Particle Physics Division), Ph.D., 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., 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., University of Rochester.

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• Zotos, Xenophon (Condensed Matter Division), Ph.D., University of Virginia.

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### Associate Professors

• Flytzanis, Nikos (Condensed Matter Division), Ph.D., University of Virginia.

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Georgakilas, Alexandros (Applied Physics Division), Doctoral degree, University of Crete.

Research interests: Applied physics and materials science of advanced semiconductor materials and devices.

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- Haldoupis, Christos (Astrophysics and Space Physics Division), Ph.D., University of Saskatchewan. Research interests: Ionospheric and space physics. e-mail: chald@physics.uoc.gr, Tel: 0030 2810 394222
- · Hatzidimitriou, Despina (Astrophysics and Space Physics Division), Ph.D., University of Edinburgh. Research interests: Optical astronomy: galaxies, maggelanic clouds, globular clusters. e-mail: dh@physics.uoc.gr, Tel: 0030 2810 394212
- Karambourniotis, Dimitrios (Applied Physics Division), Doctorat, 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
- Perakis, Ilias (Condensed Matter Division), Ph.D., University of Illinois at Urbana-Champaign.

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 Psaltakis, Grigoris (Condensed Matter Division), Ph.D., University of Essex.

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• Tsamis, Nicholas (High Energy and Elementary Particle Physics Division), Ph.D., Harvard University.

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• Tzanetakis, Panayotis (Condensed Matter Division), Doctorat, Université de Grenoble.

Research interests: Condensed matter; semiconductor physics and photovoltaic applications.

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 Vardavas, Ilias (Astrophysics and Space Physics Division), Dr., University of Sydney.

Research interests: Planetary atmospheres; environmental physics; radiative transfer.

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• Zouros, Theo (Atomic and Molecular Physics Division), Ph.D., Yale University.

Research interests: Atomic physics; ion-atom collisions; electron-ion collisions; physics of highly charged ions; high resolution electron spectroscopy.

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#### **Assistant Professors**

- Athanasiu, Gregory (High Energy and Elementary Particle Physics Division), Ph.D., Stanford University.
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- Charmandaris, Vassilis (Astrophysics and Space Physics Division), Ph.D., Iowa State University.
   Research interests: Observational, Extragalastic Astrophysics, with emphasis in Space Infrared Astronomy, molecular gas depletion and star formation in iteracting galaxies.
   e-mail: vassilis@physics.uoc.gr, Tel: 0030 2810 394245
- Ditsas, Petros (High Energy and Elementary Particle Physics Division), Ph.D., University of Manchester.
   Research interests: Elementary particle physics.
   e-mail: ditsas@physics.uoc.gr, Tel: 0030 2810 394208
- Hatzopoulos, Zaharias (Applied Physics Division),
   Ph.D., University of Wales.
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- Kiriakidis, George (Applied Physics Division), Ph.D., University of Salford.
   Research interests: Materials, thin films, gas sensors.
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- Papadakis, Sifis (Astrophysics and Space Physics Division), Ph.D., University of London.
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- Petkou, Anastasios (High Energy and Elementary Particle Physics Division), Ph.D., University of Cambridge.
   Research interests: String Theory, Quantum Field Theory, Cosmology.

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• Rakitzis, Peter (Atomic and Molecular Physics Division), Ph.D., Stanford University.

Research interests: Molecular physics.

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#### Lecturers

• Kominis, Ioannis (Atomic and Molecular Physics Division), Ph.D., Princeton University.

Research interests: Optical pumping and spin - polarized alkali atoms and noble gases, sensitive atomic magnetometers, laser cooling and trapping, precision quantum measurements. e-mail: ikominis@iesl.forth.gr, Tel: 0030 2810 391275, 391473

## Specialized Teaching Staff

• Georgiadou, Fotini, B.A. in English Studies, National and Kapodistrian University of Athens.

Interests: English for Physics.

Tel: 0030 2810 394012

• Kalpahidou, Symella, M.A. in Russian Language and Literature, University of Tashkent.

Interests: Russian language and literature.

Tel: 0030 2810 281464

Papamastoraki, Ingrid, B.A. Universität München.
 Interests: German for specific purposes.
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 Pitsaki, Maria, MSc in English Studies, National and Kapodistrian University of Athens.

Interests: English for Physics.

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#### **Emeriti**

• Grammatikakis, Giorgos, (High Energy and Elementary Particle Physics Division) Ph.D., Imperial College, University of London.

Research interests: High energy physics. e-mail: grammat@physics.uoc.gr, Tel: 0030 2810 394303

- Lambropoulos, Panayotis (Atomic and Molecular Physics Division), Ph.D., University of Michigan.
   Research interests: Laser-matter interactions.
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- Ventura, Joseph (Astrophysics and Space Physics Division), Ph.D., City University of New York.
  Research interests: High energy astrophysics; radiative processes and radiative transfer; accreting X-ray pulsars; magnetars.

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The permanent personnel of the Department includes Specialized Technical Staff that 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 Divisions is described below.

## 11.5.1 Division of High Energy Physics and Cosmology

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, Phenomenological studies of

supersymmetric extensions of the Standard Model (SM), String Theory derivation of acceptable low-energy models and consistent formulations of quantum gravity from more fundamental unified theories, problems in theoretical cosmology, as well as field theory 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 conducted 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, which permitt 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. Staff members of the laser Division play a leading international role in several competitive European research programmes and have established a large number of effective international collaborations. Some of them are members of European and international scientific boards.

The main research activities of the Division can be divided 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. The second, Applied Research, concentrates on materials growth, characterization and process analysis; novel coherent light sources; and novel laser based methods for quantitative elemental analysis. Finally, the third component, 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, and for understunding the properties of matter on the nanometerscale. It strives to understand the physics behind emerging technologies, such as the new generation of photonic, spintronic, and nanoscale devices that promise a wide variety of new applications. The goal of this group is two-fold:

- To describe, starting from basic physics 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 and devices 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.

## 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 for scientific and functional reasons, 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.

## 11.6 CAREER OPPORTUNITIES FOR GRADUATES

- o By taking 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.
- o Furthermore a physics student, by making proper

- curriculum choices, may easily move in some of the frontier directions of chemistry, chemical technology, or biology.
- o Career opportunities also arise in seemingly unrelated fields such as scientific and technical journalism, the economics, addressing complicated computational problems of modern society, and so forth.
- o For the talented physicist, the possibility always exists of pursuing postgraduate studies, and ultimately a research career at a University or research centre.

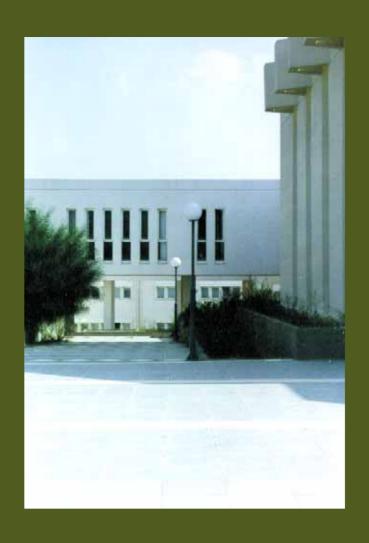


The favourable climatological conditions prevailing in Crete (large number of clear-sky nights per year) combined with the high mountains, place the island of Crete among the best locations in Europe for high quality astronomical observations.

These facts were influential in the establishment of the Skinakas Observatory.



1.3 m Telescope at Skinakas Observatory



## 12. DEPARTMENT OF COMPUTER SCIENCE

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Departmental Secretary: Smyrnaki Maria

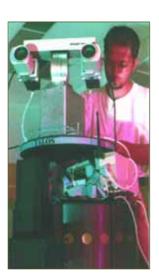
### 12.1 BACKGROUND OF THE DEPARTMENT

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





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Computer Science are:

- 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

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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 Doctoral degree. Most of the postgraduate students receive scholarships throughout their studies.

The objectives of the Postgraduate Studies Programme are:

- o 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 Doctoral degree 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
- E-Commerce Technologies
- Multimedia
- Medical Informatics and Biomedical Engineering
   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, Dr., Universtitat Osnabruck. Research interests: Logical Programming; software systems; artificial intelligence.

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• Katevenis, Manolis, Ph.D., University of California at Berkeley.

Research interests: Computer architecture; VLSI systems; high-speed networks.

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- Markatos, Evangelos, Ph.D., University of Rochester.
   Research interests: Operating systems; computer architecture; parallel and distributed systems; WWW.
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- Nikolaou, Christos, Ph.D., Harvard University.
   Research interests: Distributed systems; information economies; electronic commerce.
   e-mail: nikolaou@csd.uoc.gr, Tel: 0030 2810 393576
- Plexousakis, Dimitris, Ph.D., University of Toronto.
   Research interests: Database systems; knowledge representation.

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• Stefanidis, Constantine, Ph.D., University of Kent at Canterbury.

Research interests: Human-computer interaction. e-mail: cs@csd.uoc.gr, Tel: 0030 2810 393516

 Tollis, Ioannis, Ph.D., 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., Princeton University.
 Research interests: Communication systems; digital and analog electronics.

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 Trahanias, Panos, Doctoral degree, National Technical University of Athens.

Research interests: Computer vision; robotics; image processing; pattern recognition.

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 Tziritas, George, Doctorat, Institut Nationale Polytechnique de Grenoble.

Research interests: Digital image processing; digital video processing; computer vision; pattern recognition; image and video communication; multimedia systems.

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#### Associate Professors

 Argyros, Antonis, Doctoral degree, National Technical University of Crete.

Research interests: Computational Vision, robotics, motion and 3D structure perception, development of robot behaviors based on visual input, cognitive vision systems, multiple objects tracking, panoramic vision camer networks, alternative visual sensors.

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• Bilas, Angelos, Ph.D., 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.

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• Christophides, Vassilis, Doctorat, Conservatoire National des Arts et Metiers (CNAM), Paris.

Research interests: Object database management systems; electronic documents management systems; wide-area information integration systems.

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• Savidis, Anthony, Ph.D., University of Kent, UK.

Research Interests: Implementation of programming languages, debuggers, integrated programming environments, automatic software adaptation, extreme programming, software engineering, development of ambient intelligent environments, programming of game engines for advanced two dimensional games.

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- Stylianou, Yannis, Doctorat, ENST-Telecom.
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- Tsakalides, Panagiotis, Ph.D., University of Southern California.

Research interests: Digital signal processing; statistical communication theory; non-Gaussian time series analysis; remote sensing and imaging.

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#### Assistant Professors

 Georgakopoulos, Georgios, Doctoral degree, National Technical University of Athens.

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Papadouli, Maria, Ph.D., Columbia University, USA.
 Research Interests: Mobile computing, wireless networks, performance analysis, measurements and modeling in wireless networking, pervasive computing, positioning, peerto-peer systems, Internet real-time and multimedia systems and protocols.

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• Roussopoulou Dimitra-Isidora (Mema), Ph.D., University of Stanford, USA.

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Siris, Vasilios, Doctoral degree, 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.

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Tsamardinos, Ioannis, Ph.D., Pittsburgh University, USA.
 Research Interests: Artificial Intelligence, Biomedical Informatics, Machine Learning, Planning and Temporal Reasoning.

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Tzitzikas, Ioannis, Doctoral degree, University of Crete.
 Research Interests: Information Systems Analysis and Design, Information Retrieval Systems.

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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 394401, Fax: 0030 2810 394404

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 Profs. 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 section 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 Hellenic Centre for Marine Research (HCMR), 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 HCMR 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 programme 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 450 undergraduate students and more than 200 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 focussed 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 Section collaborate closely with the IMBB, at which many Faculty members hold a joint appointment. Furthermore, most groups maintain close collaborative ties with related research groups both within Greece and abroad. More specifically the following research groups are included:

- Yeast Molecular Genetics. Genomics-proteomics of Saccharomyces cerevisiae, functional analysis of homologous genes/proteins, transcriptional regulation of Cu++ and Fe++ homeostasis in yeast.
- Immunobiology. Regulation of the immune response by membrane and soluble class I and class II histocompatibility antigens/autoimmunity, immunology of Reproduction: mechanisms concerning the semi-allogeneic fetus development, cell differentiation: from the hemopoietic stem cell to organogenesis.
- Cell Biology. Mammalian developmental biology, mouse as model system to investigate the molecular basis of diseases.
- Molecular Genetics of Development. Cell fate acquisition in Drosophila (nervous system, eye, wing), cell-cell signaling. Notch pathway, transcriptional regulation - bHLH proteins.
- Electron Microscopy. Ultrastructural analysis of microorganisms, cells and biomolecules, developmental mechanisms regulating oogenesis and spermatogenesis in certain invertebrate species, interactions between symbiotic bacteria and their hosts at the subcellular level.
- Crystallography. Crystallographic studies of protein folding, structural studies of proteins involved in plantpathogen interactions, engineering of restriction endonucleases and DNA methyl transferases for gene therapy, analysis of the protein - DNA recognition "code", development of tools for high-throughput crystallography.

- Genetics. Genomics (genome sequencity, microarray technology), analysis of interactions between mosquitoes and malarial parasites, development of a genetic database for Anophelines.
- Human Molecular Genetics. High resolution human chromosome and gene mapping 10, experimental annotation of genes mapped to 10q23-26 associated with neurological diseases and developmental malformations (lateral temporal epilepsy, mental retardation, ectrodactyly 3, etc.), functional genomics: Research and development of technologies for the identification of gene regulatory sequences and protein functional analysis.
- Gene Regulation & Molecular Immunology. Transcriptional regulation of the Major Histocompatibility complex (MHC) class II genes in health and abnormal conditions (autoimmunity, oncogene products). The role of the MHC class II coactivator CIITA, control of MHC genes during cell cycle, apoptosis and via the action of Acetyltransferases and Histone Deacetylases, development of cell and transgenic mouse systems for the expression of MHC molecules to study and control autoimmunity and cancer.
- Biochemistry. Isolation of proteins with bioenergetic activity from marine animals, use of Lectins as Diagnostic and therapeutic tools for cancer.
- Plant Molecular Biology. Study of the plant proteins, which
  play a role in the replication and spread of viruses and viroids
  (pathogens of plants), construction of virus resistant plants.

# 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 of this group 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 of this group 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 of this group 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 of this group 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 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 in what concerns 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.
- Biosensor Technology: Development of acoustic biosensors for the real time study of biomolecular interactions; creation of membrane models for investigating cellular events such as the mechanism of anti-microbial peptides with membranes; kinetic study of immunological interactions such as protein-protein and protein-peptide; application of acoustic biosensors in biotechnology.

### 13.3 UNDERGRADUATE STUDIES

The goals of the Undergraduate Programme, at 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 accumulation of knowledge and the necessity of specialization led the Department of Biology to officially develop 2 scientific directions: I. Biomolecular Sciences and Biotechnology which concentrates mainly at the cellular and subcellular level of life, namely gene regulation, protein interactions, macromolecular structure and 2. Environmental Biology and Management of Biological Recourses which concentrates at the level of organism in the environmental context of Life.

Since the academic year 2004-05 the students select one of the two previously mentioned directions and are compelled to attend all corresponding obligatory courses as well as other optional courses at the student's discretion.

The workload of each course is counted in credits or ECTS units for international students. The semester work load 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 twenty (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 required 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 I)
- Successful completion of optional courses (Table 2). The number of optional courses depends on the student's workload (credits). Alternatively, the students may elect to fulfil 12 credits with laboratory work leading to B. Sc. Dissertation.
- Successful accumulation of at least 155 credits in total.

Before being allowed to enroll in optional courses the students must have successfully completed five (5) of the eight (8) following courses: Introduction to Zoology, Cell Biology, Plant Structure, Biochemistry I, Organic Chemistry, Genetics I, Microbiology and Ecology. Before being allowed to enroll in laboratory work leading to B. Sc. dissertation the students must have completed all the core courses.

TABLE I. CORE COURSES (COMPULSORY)

Semester A	Semester B
K- Introduction to Zoology	K- Cell Biology
K- Physics	K- Plant Structure
K- General Chemistry	K- Biochemistry I
K- Organic Chemistry	K- Biomathematics
K- Uses of Computers I	K- English II
K- English I	

Semester C	Semester D
K- Microbiology	K- Molecular and Cell Biology Methods
K- Ecology	M- Biochemistry II
K- Genetics I	M- Genetics II
K- Molecular Biology	M- Physical Chemistry
K- Methods in Microbiology & Biochemistry	Π- Animal Biodiversity
K- English III	Π- Plant Biodiversity
	П- Marine Biology
	K- English IV

Semester E	Semester F
K- Methods in Genetics and Immunology	K- Developmental Biology
K- Evolution	M- Biotechnology II
M- Enzyme Biotechnology	П- Plant Physiology
M- Immunobiology	П- Animal Physiology
Π- Biostatistics	
M- Human Genetics	
П- Biogeography	
M-Bioinformatics	

Reading Course

Quarterly Laboratorial Course

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# **TABLE 2. OPTIONAL COURSES**

W	inter Semester	Sp	ring Semester
a.	Biomolecular Sciences & Biotechnology	a.	Biomolecular Sciences & Biotechnology
	Introduction to Medical Entomology		Protein Engineering
	Regulation of Gene Expression		Topics in Enzyme Biotechnology
	Crystal Structure Determination		Analysis and Exploitation of New
	of Biological Macromolecules		Technologies in Biological Systems
	Topics on Cellular Differentiation		Molecular Oncogenesis
	Plant Molecular Biology		Molecular Plant Virology
			Special Topics in Immunology
			Protein Kinesis
			Applied Biology
			Developmental Biology of Drosophila
b.	Environmental Biology & Management	b.	Environmental Biology & Management
b.	Environmental Biology & Management of Biological Recourses	b.	Environmental Biology & Management of Biological Recourses
b.	<i>-</i> ,	b.	
b.	of Biological Recourses	b.	of Biological Recourses
ь.	of Biological Recourses Fish Biology	b.	of Biological Recourses Economic Entomology
b.	of Biological Recourses Fish Biology Aquacultures	b.	of Biological Recourses  Economic Entomology  Management of Marine Biological Recourses
b.	of Biological Recourses Fish Biology Aquacultures Terrestrial Ecosystem Management	b.	of Biological Recourses  Economic Entomology  Management of Marine Biological Recourses  Marine Biotechnology
b.	of Biological Recourses Fish Biology Aquacultures Terrestrial Ecosystem Management Topics in Physical Geography & Geomorphology	b.	of Biological Recourses  Economic Entomology  Management of Marine Biological Recourses  Marine Biotechnology  Photobiology
b.	of Biological Recourses  Fish Biology  Aquacultures  Terrestrial Ecosystem Management  Topics in Physical Geography & Geomorphology  Marine Pollution	b.	of Biological Recourses  Economic Entomology  Management of Marine Biological Recourses  Marine Biotechnology  Photobiology  Fauna of Greece
	of Biological Recourses  Fish Biology  Aquacultures  Terrestrial Ecosystem Management  Topics in Physical Geography & Geomorphology  Marine Pollution		of Biological Recourses  Economic Entomology  Management of Marine Biological Recourses  Marine Biotechnology  Photobiology  Fauna of Greece
	of Biological Recourses  Fish Biology  Aquacultures  Terrestrial Ecosystem Management  Topics in Physical Geography & Geomorphology  Marine Pollution  Benthic Ecology		of Biological Recourses  Economic Entomology  Management of Marine Biological Recourses  Marine Biotechnology  Photobiology  Fauna of Greece  Evolutionary Ecology
	of Biological Recourses  Fish Biology  Aquacultures  Terrestrial Ecosystem Management  Topics in Physical Geography & Geomorphology  Marine Pollution  Benthic Ecology  Common Courses		of Biological Recourses  Economic Entomology  Management of Marine Biological Recourses  Marine Biotechnology  Photobiology  Fauna of Greece  Evolutionary Ecology  Common Courses
	of Biological Recourses  Fish Biology  Aquacultures  Terrestrial Ecosystem Management  Topics in Physical Geography & Geomorphology  Marine Pollution  Benthic Ecology  Common Courses  Photosynthesis		of Biological Recourses  Economic Entomology  Management of Marine Biological Recourses  Marine Biotechnology  Photobiology  Fauna of Greece  Evolutionary Ecology  Common Courses  Molecular Plant Physiology of Abiotic Stress

Reading course

Quarterly Laboratorial Course Computer 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.

### 13.4 LIFELONG LEARNING PROGRAMME/ ERASMUS

Erasmus is a European Commission exchange programme that enables students in 31 European countries to study for part of their degree in another country. The Department participates in programs of the European Community that promote the free trading of students and recognizes courses that have been successfully completed in other European Universities in the context of these Community Programs. Students can participate in this programme after they complete the first year of studies in the Department.

Students, who participate in this program, may transfer credits of successfully completed courses upon approval by the Departments Undergraduate Studies Committee.

#### 13.5 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: I. Molecular Biology and Biomedicine; 2. Plant Molecular Biology and Biotechnology; 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 Masters' 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.

## 13.5.1 Molecular Biology and Biomedicine

The Postgraduate Programme in Molecular Biology and Biomedicine (MBB) has been established and run jointly by our Department 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 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) offers excellent training, allows

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.

## 13.5.2 Plant Molecular Biology and Biotechnology

Plant Molecular Biology and Biotechnology is a Postgraduate Programme leading to a Master's and to 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 graduate students in the field of Applied Biotechnology focusing on the development of transgenic plants, training in plant cell, tissue and organ cultures, increase of 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 several 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.

# 13.5.3 Environmental Biology - Management of Terrestrial and Marine Resources

This Postgraduate Program is a joint effort of the Department of Biology of the University of Crete, the Museum of Natural History of the University of Crete and the HCMR. 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 on seminars of the latest progress in subjects pertinent to the postgraduate programme. The scope of the postgraduate program includes:

- Integrated knowledge in the biology and management of marine and terrestrial resources.
- Integrated knowledge in 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 Hellenic Centre for Marine Research.
- 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.

# 13.5.4 Protein Biotechnology

This new program 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 a M. Sc. dissertation) and will be offered jointly by the Departments of Biology and Chemistry of the University of Crete as an interdisciplinary program. 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 IMBB and several external instructors from Greek and foreign academic and industrial establishments. Courses scheduled for the Academic Year 2007-08 are: Protein structure and function, Proteins in intra & extracellular environment, Methods of structural analysis of proteins, Modern techniques in analysis of proteins and proteomes, Bioinformatics and applications in the analysis of proteomes, Gene structure and genome organisation, Protein production technologies, 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 program aims at interacting closely with other international postgraduate programmes and encouraging the exchange of teachers and students and the joint preparation of Web-based teaching material.

#### 13.5.5 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 who will contribute towards strengthening bioethics in Greece. This will be achieved by providing educated staff to Universities, Research Centers, Public Administration and Health-related institutions.

#### 13.6 FACULTY MEMBERS

#### **Professors**

 Athanassakis-Vassiliadis, Irene, (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D., University of Alberta.

Research interests: Immunology, Reproductive Immunology.

e-mail: athan@biology.uoc.gr, Tel: 0030 2810 304355, 394354

 Bouriotis, Vassilios, (Division of Biotechnology and Applied Biology), Ph.D., University of Liverpool.

Research interests: Biotechnology: restriction enzymes; protein purification.

e-mail: bouriotis@biology.uoc.gr, Tel: 0030 2810 394375, 394052

• Kafatos, Fotis, (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D., Harvard University.

Research Interests: Molecular and developmental biology; mechanisms controlling gene expression; molecular evolution; molecular genetics of economically important insects.

Tel: 0030 2810 304083

 Kentouri, Maroudio, (Division of Biotechnology and Applied Biology), Doctorat, University of Aix - Marseille II and 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), Dr., Max Planck Institute.

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), Dr., 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

- Mylonas, Moisis, (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Doctoral degree, National and Kapodistrian University of Athens.
   Research interests: Zoology, terrestrial ecology.
   e-mail: mylonas@biology.uoc.gr, Tel: 0030 2810 394079, 394078
- Panopoulos, Nikolaos, (Division of Biotechnology and Applied Biology), Ph.D., 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), Doctoral degree, National and Kapodistrian 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., 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

#### Associate Professors

 Alexandraki, Despina, (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D., Harvard University.

Research interests: Molecular genetics; structural and functional analysis of yeast genes.

e-mail: alexandr@biology.uoc.gr, Tel: 0030 2910 394363, 391161

 Benos, Panagiotis, (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Doctoral degree, University of Crete.

Research interests: Bioinformatics.

 Chalepakis, George, (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Dr., University of Marburg.

Research interests: Cell biology; brain developmental biology. e-mail: chalepak@biology.uoc.gr, Tel: 0030 2810 394359, 394358

• Delidakis, Christos, (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Ph.D., Harvard University.

Research interests: Molecular genetics of development; cell fate specification mechanisms by intercellular signalling and transcriptional regulation; emphasis on Notch signalling and on networks of transcription factors in developmental decisions in Drosophila.

e-mail: delidaki@biology.uoc.gr, Tel: 0030 2810 391112, 391142

- Economou, Anastasios, (Division of Biotechnology and Applied Biology), Ph.D., University of East Anglia, Norwich.
   Research interests: Microbiology.
   e-mail: aeconomo@biology.uoc.gr, Tel: 0030 2810 394371, 391166
- Karakassis, Ioannis, (Division of Biotechnology and Applied Biology), Doctoral degree, University of Crete. Research interests: Marine Ecology and Biodiversity; Dynamics of coastal ecosystems; Anthropogenic effects on marine communities; Environmental impacts of Aquaculture. e-mail: karakassis@biology.uoc.gr, Tel: 0030 394061, 394064
- Kotzabasis, Kyriakos, (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Dr., University of Marburg.

Research interests: Plant physiology and biochemistry, photobiology, photosynthesis.

e-mail: kotzab@biology.uoc.gr, Tel: 0030 2810 394059, 394068

#### Assistant Professors

 Gizeli, Electra, (Division of Biotechnology and Applied Biology), Ph.D., University of Cambridge, Institute of Biotechnology.

Research interests: Biotechnology; acoustic immunosensors; chemical sensors for detecting binding reactions. e-mail: gizeli@biology.uoc.gr, Tel: 0030 2810 394373, 394093

• Lika, Konstadia, (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Ph.D., University of Tennesee.

Research interests: Theoretical biolotgy and evolutionary ecology.

e-mail: lika@biology.uoc.gr, Tel: 0030 2810 394081

- Pavlidis, Michael, (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Doctoral degree, National and Kapodistrian University of Athens.
   Research interests: Fish physiology; environmental and horonal mechanisms regulating reproduction of fish species.
   e-mail: pavilidis@biology.uoc.gr, Tel: 0030 2810 394084, 394089
- Pirintsos, Stergios, (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Doctoral degree, 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

 Somarakis, Stylianos, (Division of Biology of Organisms, Populations, Environmental and Marine Biology), Doctoral degree, University of Crete.

Research interests: Marine Biology. e-mail: somarak@biology.uoc.gr, Tel: 0030 2810 394065

• Tsagri, Efthimia, (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Dr., Universität Giessen.

Research interests: Plant molecular virology. e-mail: tsagris@biology.uoc.gr, Tel: 0030 2810 394367, 394366

 Zaxos, George, (Division of Biochemistry, Molecular Biology, Cellular and Developmental Biology), Doctoral degree, Medical School, University of Crete.

Research interests: Cell Biology.

## Lecturers

Ladukakis, Emmanoel, (Division of Biology of Organisms,

Populations, Environmental and Marine Biology), Doctoral degree, University of Crete.

Research interests: Evolutionary Zoology.

Specialized Technical Staff (Undergraduate Students Laboratories)

- Dokianaki, Despina
   e-mail: dokianakis@biology.uoc.gr, Tel: 0030 2810 394460
- Dramountani, Maria
   e-mail: dramount@biology.uoc.gr, Tel: 0030 2810 394074
- Gomboitsos, Athanasios e-mail: gos@biology.uoc.gr, Tel: 0030 2810 394058, 394415
- Kouimtzoglou, Eleni, Phd. 1999
   e-mail: elenakou@biology.uoc.gr, Tel: 0030 2810 394460
- Liapaki, Catherine
   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
- Petropoulos, Konstantinos
   e-mail: petro@biology.uoc.gr, Tel: 0030 2810 394432

The Department also employees Adjunct Professor on a yearly contract basis.

#### 13.7 RETIRED PROFESSORS

- Damanakis, Michael, e-mail: daman@biology.uoc.gr
- Eleftheriou, Anastasios, e-mail: telef@imbc.gr
- Zouros, Eleftherios, e-mail: zouros@biology.uoc.gr

- Nafpaktitis, Vasileios, e-mail: knafpaktitis@hotmail.com
- Economopoulos, Aristeidis, e-mail: economop@imbb. forth.gr
- Stratakis, Emmanoel, e-mail: stratakism@biology.uoc.gr
- Tsimenidis, Nikolaos, e-mail: ntsimen@biology.uoc.gr

### 13.8 HONORARY PROFESSORS

•	David HOGNESS (Stanford U., USA)	1986
•	Ilse SCHWIDETZKY (Mainz, Germany)	1988
•	Robert SOKAL (Suny at Stony Brook, USA)	1990
•	Francois JACOB (Institut Pasteur, Paris, France)	1991
•	Richard LEWONTIN (Harvard U., USA)	1996
•	Michael ASHBURNER (Cambridge U., UK)	2002

#### 13.9 CAREER OPPORTUNITIES FOR GRADUATES

Upon graduation the students of the Department of Biology have acquired the skills for various job appointments:

- Work in public and private sectors in the context of Biomedicine, Biotechnology, environmental protection, pollution control and fisheries.
- Work as researchers in public or private Research Institutes.
- Exert teaching activity at all educational levels (from high schools to Universities).
- To be appointed in Health Units of the public and private sector focusing on genetic diagnosis, birth control, in vitro fertilization, molecular diagnosis etc.
- Work in industries, especially in sectors of food technology and pharmaceuticals.





## 14. DEPARTMENT OF CHEMISTRY

Website: www.chemistry.uoc.gr, e-mail: secrchem@chemistry.uoc.gr
Head of the Department: Assoc. Professor Theofanis Kitsopoulos
e-mail: chairman@chemistry.uoc.gr,Tel: 0030 2810 545002

e-mail: xatzidak@chemistry.uoc.gr, Tel: 0030 2810 545020, Fax: 0030 2810 545001

Departmental Secretary: Evangelia Chatzidaki-Mavroudi

#### 14.1 BACKGROUND OF THE DEPARTMENT

The Department of Chemistry, located at the University campus 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.



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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 <sup>nd</sup> Semester	Credits
Principles of Chemistry	6	Introduction to Biology	6
Qualitative and Quantitative Analysis	6	Organic Chemistry I	6
Mathematics I	6	Mathematics II	6
Physics I	6	Physics II	6
Introduction to Computers	6	General Chemistry Laboratory	6
Foundation Course in English		Foundation Course in English	
for Chemistry I (Elective)	6	for Chemistry II (Elective)	6
Total Credits	36	Total Credits	36
3rd Semester	Credits	4th Semester	Credits
Analytical Chemistry I	6	Analytical Chemistry II	6
Physical Chemistry I	6	Physical Chemistry II	6
Organic Chemistry II	6	Inorganic Chemistry I	6
Physical Chemistry Laboratory I	6	Analytical Chemistry Laboratory I	6
Organic Chemistry Laboratory I	6	Organic Chemistry Laboratory II	6
Total Credits	30	Total Credits	30
Total Credits	30	Total Credits	30
5th Semester	Credits	6th Semester	Credits
5th Semester	Credits	6 <sup>th</sup> Semester	Credits
5th Semester Biochemistry I	Credits	6th Semester Biochemistry II	Credits 6
5th Semester Biochemistry I Chemistry of Biomolecules	Credits 6	6th Semester Biochemistry II Environmental Chemistry	Credits 6 6
5th Semester Biochemistry I Chemistry of Biomolecules Inorganic Chemistry II	Credits  6  6  6	6th Semester Biochemistry II Environmental Chemistry Physical Chemistry Laboratory II	Credits 6 6
5th Semester  Biochemistry I  Chemistry of Biomolecules  Inorganic Chemistry II  Inorganic Chemistry Laboratory I	Credits  6  6  6  6	6th Semester  Biochemistry II  Environmental Chemistry  Physical Chemistry Laboratory II  Inorganic Chemistry Laboratory II	6 6 6 6
5th Semester Biochemistry I Chemistry of Biomolecules Inorganic Chemistry II Inorganic Chemistry Laboratory I Analytical Chemistry Laboratory II	Credits  6  6  6  6  6	6th Semester  Biochemistry II  Environmental Chemistry  Physical Chemistry Laboratory II  Inorganic Chemistry Laboratory II  Biochemistry Laboratory	6 6 6 6 6
5th Semester Biochemistry I Chemistry of Biomolecules Inorganic Chemistry II Inorganic Chemistry Laboratory I Analytical Chemistry Laboratory II Total Credits	Credits 6 6 6 6 6 30	6th Semester  Biochemistry II  Environmental Chemistry  Physical Chemistry Laboratory II  Inorganic Chemistry Laboratory II  Biochemistry Laboratory  Total Credits	6 6 6 6 6 6 30
5th Semester Biochemistry I Chemistry of Biomolecules Inorganic Chemistry II Inorganic Chemistry Laboratory I Analytical Chemistry Laboratory II Total Credits 7th Semester	Credits  6  6  6  6  6  7  6  Credits	6th Semester Biochemistry II Environmental Chemistry Physical Chemistry Laboratory II Inorganic Chemistry Laboratory II Biochemistry Laboratory Total Credits 8th Semester	Credits  6  6  6  6  6  Credits
5th Semester Biochemistry I Chemistry of Biomolecules Inorganic Chemistry II Inorganic Chemistry Laboratory I Analytical Chemistry Laboratory II Total Credits 7th Semester Elective course I	Credits  6  6  6  6  6  7  6  Credits  6	6th Semester  Biochemistry II  Environmental Chemistry  Physical Chemistry Laboratory II  Inorganic Chemistry Laboratory II  Biochemistry Laboratory  Total Credits  8th Semester  Elective course 6	6 6 6 6 30 Credits 6
5th Semester  Biochemistry I  Chemistry of Biomolecules Inorganic Chemistry II Inorganic Chemistry Laboratory I  Analytical Chemistry Laboratory II  Total Credits  7th Semester  Elective course I  Elective course 2	Credits 6 6 6 6 6 30 Credits 6 6	6th Semester  Biochemistry II  Environmental Chemistry  Physical Chemistry Laboratory II  Inorganic Chemistry Laboratory II  Biochemistry Laboratory  Total Credits  8th Semester  Elective course 6  Elective course 7	Credits  6  6  6  6  7  6  6  6  6  6  6  6  6
5th Semester  Biochemistry I  Chemistry of Biomolecules  Inorganic Chemistry II  Inorganic Chemistry Laboratory I  Analytical Chemistry Laboratory II  Total Credits  7th Semester  Elective course I  Elective course 2  Elective course 3	Credits  6  6  6  6  30  Credits  6  6  6  6	6th Semester  Biochemistry II  Environmental Chemistry  Physical Chemistry Laboratory II  Inorganic Chemistry Laboratory II  Biochemistry Laboratory  Total Credits  8th Semester  Elective course 6  Elective course 7  Elective course 8	Credits  6  6  6  6  6  7  6  6  6  6  6  6  6

### 14.3 DIVISIONS OF THE DEPARTMENT

14.3.1 Division of Biochemistry: Protein chemistry; Structural and functional properties of enzymes nanomachines mediating intracellular protein targeting, and assembly; Biophysics of redox metalloenzyme catalysis, time-resolved resonance Raman and FTIR studies of rapid biological electron transfer reactions, cellular biochemistry; membranome biogenesis; chaperone-mediated biotechnological production of membrane proteins of pharmaceutical interest; mitochondrial chemistry and biogenesis in neurodegeneration, pathogenic bacteria toxicity and cell death

14.3.2 Division of Environmental and Analytical Chemistry: Environmental chemistry and physics of atmospheric processes; Study of climate changes related to human activities and natural processes; Environmental organic chemistry of atmospheric and aquatic systems; Electroanalytical chemistry; Speciation of metals and metalloids; Development of advanced Mass Spectrometric techniques for the analysis of organic and organometallic compounds.

14.3.3 Division of Inorganic Chemistry: Bio-inorganic chemistry, a biomimetic approach for energy conversion systems or design of new drugs for DNA, RNA interactions; Crystal growth and design, water chemical technology, chemistry of colloids and surfaces, material science.

14.3.4 Division of Organic Chemistry: Photo oxygenations; Natural product chemistry; Biotransformations in organic chemistry; Synthesis and Structure - Activity Relationship (SAR) studies; Intrazeolite thermal and photochemical transformations; Total synthesis of bioactive natural products. Synthesis and spectal studies of fluorescent ion probes in biological systems

14.3.5 Division of Physical and Theoretical Chemistry: Theoretical and computational studies in chemical dynamics; Ab-initio investigation of structural and electronic properties of organic and inorganic molecules; Development of new methodologies for the quality control and authentication of olive oil. Structure determination of natural products by using multi-dimensional NMR Spectroscopy; Gas-phase and heterogeneous chemical kinetics and laser photochemistry; Experimental studies in chemical dynamics; The physical chemistry and physics of polymeric systems.

#### 14.4 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.

# 14.4.1 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 Doctoral degree. 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., Doctoral degree)
   (http://www.cc.forth.gr/~TCCC/AMS\_EPEAEK/index.html)
- o Natural Products (M.Sc., Doctoral degree)
- 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.

## b. Doctoral Degree

The Postgraduate Studies Programme leading to the

Doctoral 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 Doctoral 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 Doctoral 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.

## **14.4.2** 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 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.
- 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:
  - 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.
  - b. 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.

## 14.4.3 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.

## 14.4.4 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.

#### 14.5 FACULTY MEMBERS

metalloporphyrinic complexes.

#### **Professors**

- Chaniotakis, Nikolas A. (Division of Environmental and Analytical Chemistry), Ph.D., 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 545018
- Coutsolelos, Athanassios G. (Division of Inorganic Chemistry), Thèse d' Etat, 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
- e-mail: coutsole@edu.uoc.gr, Tel: 0030 2810 545045
- Dais, Photis (Division of Physical and Theoretical Chemistry), Ph.D., 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 545037
- Farantos, Stavros C. (Division of Physical and Theoretical Chemistry), Ph.D., 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 545061

• Ghanotakis, Demetrios F. (Division of Biochemistry), Ph.D., Michigan State University.

Research interests: Protein chemistry; structural and functional properties of enzymes.

e-mail: ghanotakis@chemistry.uoc.gr, Tel: 0030 2810 545034

• Katerinopoulos, Haralambos E. (Division of Organic Chemistry), Ph.D., 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 545062

- Mihalopoulos, Nikolaos (Division of Environmental and Analytical Chemistry), Doctorat, 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 545062
- Orfanopoulos, Michael (Division of Organic Chemistry), Ph.D., 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 545030

 Papagiannakopoulos, Panos (Division of Physical and Theoretical Chemistry), Ph.D., 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 545031

- Stephanou, Euripides G. (Division of Environmental and Analytical Chemistry), Dr., 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 545028
- Varotsis, Constantinos A. (Division of Biochemistry),
   Ph.D., 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 545053

#### **Associate Professors**

- Kanakidou, Maria (Division of Environmental and Analytical Chemistry), Doctorat, 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 545033
- Kitsopoulos, Theofanis N. (Division of Physical and Theoretical Chemistry), Ph.D., 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 545067

 Rizos, Apostolos K. (Division of Physical and Theoretical Chemistry), Ph.D., 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 545048

• Smonou, Ioulia (Division of Organic Chemistry), Doctoral

degree, 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 545010

Stratakis, Manolis (Division of Organic Chemistry),
 Doctoral degree, University of Crete.

Research interests: Intrazeolite thermal and photochemical transformations. Mechanistic studies and synthetic transformations of enophilic addition to alkenes. Biominetic natural product synthesis.

e-mail: stratakis@chemistry.uoc.gr Tel: 0030 2810 545087

#### Assistant Professors

Demadis, Konstantinos (Division of Inorganic Chemistry),
 Ph.D., University of Michigan, Ann Arbor.

Research interests: Crystal growth of sparingly soluble salts, colloid and interface science, terapeutic agents for calcium deposition diseases based on organic phosphonates, metal-phosphonate chemistry, ionorganic-organic hybrid materials, corrosion inhibition, green chemistry, biodegradable additives in chemical water treatment, water chemical technology. e-mail: demadis@chemistry.uoc.gr, Tel: 0030 2810 545051

 Froudakis, George (Division of Physical and Theoretical Chemistry), Doctoral degree, 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 545055

• Pergantis, Spiros A. (Division of Environmental and Analytical Chemistry), Ph.D., University of British Columbia. 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.

Trikalitis, Pantelis N. (Division of Inorganic Chemistry),
 Doctoral degree, University of Ioannina.

e-mail: spergantis@chemistry.uoc.gr, Tel: 0030 2810 545084

Research Interest: Multifuctional nanostructured materials. Design, synthesis and characterization of novel solids including inorganic - organic hybrids and open framework porous materials, based on main group metal chalcogenides and transition metal oxides.

e-mail: ptrikal@chemistry.uoc.gr, Tel: 0030 2810 545052

• Tsiotis, Georgios (Division of Biochemistry), Dr., Max-Planck-Institut.

Research Interests: Structure and funcion of proteins; Protein interactions; Proteomics. Membrane proteomics: Development of methods to analyse hydrophobic proteins by mass spectroscopy. Biodegradation: Application of oxygenic and anoxygenic bacteria in the waste treatment. Intracellular pathogenic bacteria: Life cycle of pathogenic bacteria in the phagolysomes. Role of the bacterial proteins in its survive.

e-mail: tsiotis@chemistry.uoc.gr, Tel: 0030 2810 545006

 Vassilikogiannakis, Georgios (Division of Organic Chemistry), Doctoral degree, 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 545074

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.

#### 14.6 RESEARCH FACILITIES

All of the Department's research and teaching activities are conducted at its new building located in the University Campus at Voutes in Heraklio. 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 building. 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, Raman, Single Crystal XRD, 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 a 500 MHz Bruker and a 300 MHz Bruker solid state NMR spectrometer. A Departmental Committee oversees the operation of this sensitive facility for maximum efficiency. Since 2007 a state of the art single crystal XRD

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facility with a STOE IPDS system is available. Single - crystalline compounds can be studied and their atomic structures could be solved. 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 state-of-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

Acting Head of the Department: Assoc. Professor George Makrakis

e-mail: chairperson@tem.uoc.gr, Tel: 0030 2810 393702

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 576 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 a high level 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 and development of research in an important and central scientific discipline. 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 high - level international standards.



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#### 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**

Athanasopoulos, Ioannis, Ph.D., University of Illinois.
 Research interests: Nonlinear Analysis, Partial Differential
 Equations, Free Boundary Problems, Homogenization,
 Stochastics, Finance.

e-mail: athan@tem.uoc.gr, Tel: 0030 2810 393870

Makridakis, Charalambos, Doctoral degree, 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@tem.uoc.gr, Tel: 0030 2810 393726

Rosakis, Phoebus, Ph.D., California Institute of Technology.

Research interests: Mathematical modelling in continuum mechanics. Nonlinear elasticity. Problems involving instabilities in crystalline solids. Conservation laws with non - classical shock waves and PDEs that change type with applications to dynamics of phase transformations, twinning and martensite growth, shape memory, phase boundary motion, microstructure evolution in transforming materials. Nonlinearity effects in dislocations and other crystal defects. Constitutive inequalities. Mathematical theory of plasticity. Ferroelectrics. e-mail: phoebus@tem.uoc.gr, Tel: 0030 2810 393722

• Tzavaras, Athanasios, Ph.D., Brown University. Research interests: Applied analysis; continuum physics; kinetic theory.

e-mail: tzavaras@tem.uoc.gr, Tel: 0030 2810 393710

#### **Associate Professors**

Makrakis, George, Doctoral degree, National Technical University of Athens.

Research interests: Wave propagation (underwater acoustics, elasticity, water waves); inverse scattering; asymptotic techniques, Perturbation methods; partial differential & integral equations.

e-mail: makrakg@tem.uoc.gr, Tel: 0030 2810 393708

Filippas, Stathis, Ph.D., Courant Institute, New York. Research interests: Partial differential equations; dynamical systems.

e-mail: filippas@tem.uoc.gr, Tel: 0030 2810 393713

#### Assistant Professors

Efremidis, Nikolaos, Doctoral degree, National Technical University of Athens.

Research interests: Nonlinear waves in Hamiltonian and dissipative nonlinear partial differential equations and differential difference equations with applications in optics and lasers, solitons, nonlinear Floquet theory, dynamical systems and bifurcations, perturbations and asymptotic methods, modeling and simulations, numerical methods of PDEs.

e-mail: nefrem@tem.uoc.gr

Karali, Georgia, Doctoral degree, University of Athens. Research interests: Nonlinear Partial Differential Equations, Applied Mathematics.

e-mail: gkarali@tem.uoc.gr

- Karavelas, Menelaos, Ph.D., Stanford University. Research interests: Geometric computing and Computational Geometry: algorithms and combinatorial properties for Voronoi diagrams of curved objects; analysis and efficient evaluation of geometric predicates; efficient implementation of geometric algorithms; kinetic Data Structures for Voronoi diagrams and applications to proximity problems. Computer Aided Geometric Design: Appproximation and control of curves and surfaces represented through polynomial or rational functions such as Bezier or B-splines.
- Katsaounis, Theodoros, Ph.D., 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
- Loulakis, Michail, Ph.D., Courant Institute, New York

University.

Research interests: Probability, stochastic processes, large scale stochastic dynamics.

e-mail: loulakis@tem.uoc.gr, Tel: 0030 2810 393726

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

- o 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

Head of the Department: Assoc. Professor Nikos Pelekanos

Tel: 0030 2810 394107, Fax: 0030 2810 394106

Departmental Secretariat

Tel: 0030 2810 393450/51, Fax: 0030 2810 393452

Departmental Secretary: Maria Katehaki Georgiadi

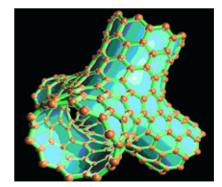
#### 16.1 BACKGROUND OF THE DEPARTMENT

The new Department of Materials Science and Technology constitutes a high quality educational and research centre with emphasis on magnetic and optoelectronic materials, polymers and colloids, biomaterials and nanotechnology. The expertise of the faculty covers these areas from the experimental as well as the computational points of view.

The Department is located at the University campus in Heraklion, and collaborates closely with the nearby Foundation for Research and Technology Hellas (FORTH), which possesses significant infrastructure, including state-of-the-art instrumentation in many closely related areas. The Postgraduate Programme offers high-level training, leading to Master's and Ph.D. Degrees. There are currently 271 undergraduate and 22 graduate students.

## 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



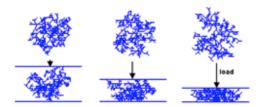
This figure shows the theoretical model of nanostructured carbon

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respect to the design and manufacture of complex materials that 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 addresses nearly all classes of materials with an emphasis on the relationship between structure and properties, processing and performance. It involves the design, synthesis, characterization, control and modification of materials that meet the requirements of the contemporary 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 biologically relevant materials.

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 energy and the need for advanced medicines.



This figure shows a simulated dendrimer and its changing conformation under load.

#### 16.3 UNDERGRADUATE STUDIES

#### 16.3.1 General Description

To receive 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 three semesters include primarily courses in fundamental sciences, i.e., mathematics, chemistry, physics, biology and computer science. Then, the student is introduced to core topics such as thermodynamics and statistical mechanics, transport phenomena and mechanics of solids, contemporary physics and materials analysis techniques. Finally, selective courses on special topics, such as optoelectronic and photonic materials, polymer-physics, ceramics, biomaterials and colloids, are offered.

A central element of the education is the laboratory training, which includes laboratories in basic physics, chemistry, and mechanics, as well as more advanced hard materials, materials characterization techniques, soft and biological materials, optoelectronic materials.

#### 16.3.2 Programme of Studies

The table below indicates the specific courses offered by 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	С	2 <sup>nd</sup> Semester	С
101 General Physics I	4	102 General Physics II	4
III General Mathematics I	4	II2 General Mathematics II	4
113 Computer Science 0	3	114 Computer Science I	4
121 General Chemistry	4	116 Applied Mathematics	3
141 Materials I: Introduction to Materials Science	e 3	122 Organic Chemistry	3
011 English Language I	I	124 Chemistry Laboratory	4
		012 English Language II	I
		41.0	
3rd Semester	С	4th Semester	С
201 Contemporary Physics-	3	204 Physics Laboratory II:	3
Introduction to Quantum		Electricity - Optics	
Mechanics	2	232 Biochemistry & Molecular	3
203 Physics Laboratory I:	3	Biology	2
Mechanics - Heat	2	244 Classical Thermodynamics	3
211 Differential Equations	3	242 Materials III: Microelectronic-	3
213 Computer Science II	4	Optoelectronic-Magnetic Materials	2
243 Materials II: Polymers-	3	246 Materials Preparation Tecniques	3
Colloids - Biomaterials		248 Structural & Chemical Analysis of Materials	3
5th Semester	С	6th Semester	С
301 Electromagnetism	3	344 Hard Matter Laboratory	4
303 Statistical Thermodynamics	3	Electives	15
305 Solid State Physics: Introduction	3		
335 Molecular Cell Biochemistry	3		
343 Soft Matter Laboratory	4		
Electives	10		
7th Semester	С	8th Semester	С
Elective Compulsory	18	Electives	76
Electives	9		

#### **16.4 FACULTY MEMBERS**

#### **Professors**

• Fytas George, Dr., Technical University of Hannover. Research interests: The current activities include: (i) Collective dynamics and ordering in soft materials in bulk and near solid surfaces, (ii) phononic structures and (iii) development of experimental techniques (ewanescent wave-surface plasmon resonance, fluorescence correlation and Brillouin spectroscopy).

e-mail: fytas@iesl.forth.gr, fytas@materials.uoc.gr Tel: 0030 2810 391302

- Hatzikiriakos, Savvas, Ph.D., McGill University. Research Interests: Polymer and blend rheology, polymer processing, flow instabilities, paste rheology. e-mail: hatzikir@iesl.forth.gr, sgh@materials.uoc.gr
- Soukoulis, Costas, Ph.D., University of Chicago, USA. Research interests: Electron and light localization, photonic band gap materials (one of the founders), random lasers, photonic crystals and left-handed materials.

e-mail: soukoulis@iesl.forth.gr, soukoulis@materials.uoc.gr, Tel: 0030 2810 391380

#### Associate Professors

 Kioseoglou, George, Ph.D., State University of New York.

Research Interests: Semiconductor spintronics; spin injection, transport and detection; physics and applications of semiconductor nanostructures; quantum-dot spin-LEDs; ferromagnetic semiconductors.

e-mail: gnk@materials.uoc.gr

Manias, Evangelos, Doktoral, University of Groningen.
 Research Interests: Polymer manostructures with novel functionalities; polymer/Inorganic nanocomposites;

classical molecular modeling of polymers, including nonequilibrium simulations; scanning probe techniques of polymer and polymer-composites surfaces, including AFM; design and synthesis of smart (temperature-and chemicalresponsive) water soluble polymers.

e-mail: manias@materials.uoc.gr

Mitraki Anna, Doctorat, University Paris-Sud.
 Research interests: The proteins as biomaterials; engineering and design of fibrous biomaterials; self-assembling peptides; protein folding and assemply; protein enginnering and production.

e-mail: mitraki@materials.uoc.gr, Tel: 0030 2810 394095

- Pelekanos, Nikos, Ph.D., Brown University.

  Research interests: Design and demonstration of novel optoelectronic devices, including Stark-tunable laser diodes, polariton lasers, and GaN-based devices Singledot spectroscopy of semiconductor quantum dots.

  e-mail: pelekano@materials.uoc.gr, Tel: 0030 2810 394107
- Tokatlidis, Kostas, Ph.D., University of Delaware. Research Interests: Cellular biochemistry, protein structure, function, folding and assembly, Biomolecular nanomachines in intracellular trafficking, molecular chaperones, mitochondria biogenesis redox control and disease, protein design, enginnering and biotechnology, production of proteins of pharmaceutical interest, membrane protein biochemistry.
- Vlassopoulos, Dimitris, Ph.D., Princeton University. e-mail: dvlasso@iesl.forth.gr, dvlasso@materials.uoc.gr, Tel: 0030 2810 391469

e-mail: tokatlid@imbb.forth.gr, Tel: 0030 2810 391136/37

#### Assistant Professors

Kopidakis, George, Ph.D., Iowa State University.

Research Interests: Theory and modeling of materials. Current activities include atomistic simulations with quantum and classical models for the structural, vibrational, mechanical, electronic, optical properties of amorphous and nanostructured materials, fundamentals and applications of localization and transfer of nonlinear excitations.

e-mail: kopidaki@materials.uoc.gr, Tel: 0030 2810 394218

 Petekidis, George, Doctoral degree, University of Crete.

Research Interests: Experimental Soft Condensed Matter. Dynamics of colloidal dispersions in bulk and near a wall. Colloidal systems out equilibrium. Dynamics, rheology and ageing of soft colloidal and gels. Effects of particle interaction on the dynamics and rheology. Instrumentation: Combination of light techniques with rheology.

e-mail: georgp@iesl.forth.gr, Tel: 0030 2810 391490

• Savvidis Pavlos, Ph.D., University of Southampton. Research Interests: Ultrafast studies of non-linear interactions of semiconductor and organic nanostructures; Manipulation of electronic and photonic wavefunctions in patterned materials to produce novel interactions; Spectroscopy of single semiconductor quantum dots; Terahertz dynamic in semiconductor quantum structures far from equilibrium, Bloch oscillators.

e-mail: psav@materials.uoc.gr Tel: 0030 2810 394147

· Vamvakaki Maria, Ph.D., University of Sussex.

Research interests: Synthesis and characterization of novel functional polymers of various architectures; synthesis of model responsive polymer networks and characterization of their swelling behavior; self-assembly and structure formation of polymeric materials and biomedical applications of polymers.

e-mail: vamvakak@materials.uoc.gr Tel: 0030 2810

#### 395019

Velonia, Kelly, Doctoral degree, University of Crete.
 Research Interests: Self-assembly, Supramolecular and Polymer Chemistry. Nanotechnology. Biocatalysis. Single Catalysis. Desigh, synthesis and characterization of novel functional biohybrid materials. Study and programming of self-assembly of biopolymers aiming at novel multifunctional biomaterials such as nanoreactors with biomedical applications.

e-mail: velonia@materials.uoc.gr, Tel: 0030 2810 394095

#### Lecturers

 Papazoglou Dimitris, Doctoral degree, Aristotelion University of Thessaloniki.

e-mail: dpapa@iesl.forth.gr Tel: 0030 2810 391273

The Department also has 4 Specialized Technical Staff members who assist in teaching and research activities. In addition, the Department employs 14 Adjunct Professors on a yearly contract basis.

#### 16.5 LABORATORIES

The Department offers its students the opportunity to become familiar with modern experimental techniques in the study of structure and materials' properties. All undergraduate students are required to take a series of laboratory courses, in recently renovated laboratories, some of which are offered in cooperation with the Departments of Physics and Chemistry.

The Department hopes in the future to offer optional educational lab courses - in addition to the compulsory labs - on subjects relating to the research activities of the faculty members of the Department. Moreover, in cooperation with FORTH, the Department provides interested students with the option to receive additional training in the advanced research laboratories at FORTH.

#### 16.6 ADDITIONAL FACILITIES

The Library of the Faculty of Sciences with current subscriptions to most international periodicals, electronic access to Greek and foreign databases and thousands of monographs in all Material Sectors, comprises an essential tool for faculty staff and students. In addition, the direct cooperation with the library of FORTH ensures the immediate access to magazine titles and books not existing in the Department.

FORTH is one of main national research centres in Greece and consists of seven Institutes located in the cities of Heraklion, Rethymnon, Patras and Ioannina. 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. These Institutes contribute to the training of the students of the Department of Materials Science and Technology. At the same time faculty conduct their research at these Institutes.

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. 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 calculation purposes. For this purpose, two PC Labs have been created with the latest programmes for various applications. The facilities are at the students' disposal for 12 hours a day.

#### 16.7 CAREER OPPORTUNITIES FOR GRADUATES

Materials science and technology graduates can be employed in a wide range of industries and technology businesses, such as those involved with metals, ceramics, glass (and fibre optics), polymers and plastics, electronic materials (microelectronics, opto-electronics, batteries, cables, magnetic materials etc.), colloids (paint, medicine), and biomaterials (biosustainable products, prosthetics, biomedical applications).

Public and private energy and telecommunications organizations can also employ materials scientists, since research and development of new and/or improved 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 high school students Physics, Chemistry, basic Biology, Technology of materials and processes and other related subjects. There are also numerous academic and research career opportunities worldwide. 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

Acting Dean:
Assoc. Professor Odysseas - Ioannis Zoras

Tel: 0030 2810 394731 E-mail: ozoras@med.uoc.gr

Secretary : Marietta Dermirtzaki

Tel: 0030 2810 394800 Fax: 0030 2810 542115

E-mail: medsec@mmed.uoc.gr

DEPARTMENT:

→ Medicine



## 17. DEPARTMENT OF MEDICINE

Website: www.med.uoc.gr

Head of the Department: Assoc. Professor Odysseas - Ioannis Zoras

e-mail: medsec@med.uoc.gr, Tel: 0030 2810 394791, 394762

Departmental Secretariat

Tel: 0030 2810 394510

Departmental Secretary: Marietta 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.



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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

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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 researchers in translational medical 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 Doctoral Degrees

Students with a Bachelor's or Master's degree can apply to the Doctoral 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 Doctoral degree. 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, Head, Dr., University of Freibourg.

Research interests: 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.

e-mail: cstourn@med.uoc.gr, Tel: 0030 2810 394563, Fax: 0030 2810 394530

• Zannis, Vassilis, Professor of Biochemistry, Ph.D., University of California at Berkeley.

Research interests: Structure and function of apolipoproteins and regulation of their genes: a) Role of apoAI in the biogenesis and functions of HDL, b) Role of apo E in atherogenesis and in Alzheimer's disease, c) role of hormone nuclear receptors in the regulation of the apolipoprotein genes in vivo.

e-mail: vzannis@acs.bu.edu, Tel: 0030 2810 394553, Fax: 0030 2810 394530

• Eliopoulos, Aristides, Assoc. Professor, Doctoral degree, University of Crete.

Research interests: Molecular biology of cancer; signal transduction; viruses and cancer; gene therapy for cancer. e-mail: eliopag@med.uoc.gr; Tel: 0030 280 394565/819, Fax: 0030 2810 394530

 Kardassis, Dimitrios, Assoc. Professor of Biochemistry, Ph.D., Boston University.

Research interests: Transcriptional mechanisms that regulate the cytostatic programme of the TGFB and P53 tumor suppressor pathways; structure-function analysis and regulation of smud proteins; regulations of genes inlvolved in lipoprotein metabolism and the pathogenesis of atherosclerosis.

e-mail: kardasis@imbb.forth.gr, Tel: 0030 2810 394549, Fax: 0030 2810 394530

 Moustakas Aristidis, Assoc, Professor of Biochemistry, Ph.D., University of Minnesota.

Research interests: Transforming growth factor B and Notch signal transduction: signaling mechanisms, ubiquitin-mediated processes and proteolysis, gene expression analysis including micro-RNA genes, roles of TGF-B and Notch in tumor suppression and metastasis.

e-mail: Aris.Moustakas@LICR.u.u.se, Tel: 0046-18-

160414, Fax: 0046-18-160420, 0030 2810 394530

• Theodoropoulos, Panayiotis, Assist. Professor of Biochemistry, Doctorat, University of Lille I.

Research interests: Organisation and function of the nuclear envelope; the role of microtubules, tubulin and anti-mitotic drugs in the dynamic breakdown and reconstruction of the nuclear envelope during cell division. e-mail: takis@med.uoc.gr, Tel: 0030 2810 394546, Fax: 0030 2810 394530

 Papakonstanti Evangelia, Lecturer of Biochemistry, Doctoral degree, University of Crete.

Research interests: Molecular mechanisms underlying directional cell migration and cell survival with focus on cancer cell growth, metastasis and inflammation. Role of the pathways regulated by Rho GTPases and PI3 kinase-isoforms.

e-mail: epapak@med.uoc.gr, Tel: 0030 2810 394554, Fax: 0030 2810 394530

## **Laboratory of Chemistry**

 Mavrothalassitis, Georgios, Assoc. Professor of Chemistry, Doctoral degree, University of Thessaloniki.
 Research interests: Transcriptional regulation and

intracellular signalling; ETS oncogenes in the framework of ras/MAPK during cell proliferation, differentiation and development.

e-mail: mavro@med.uoc.gr, Tel: 0030 2810 394537, Fax: 0030 2810 394530

#### Laboratory of Molecular Biology and Genetics

 Savakis, Charalambos, Professor of Molecular Biology and Genetics, Ph.D., Harvard University.

Research interests: Molecular genetics of Drosophila and other insects; genetic engineering for insects of medical

and economic importance; structure and function of transposable elements.

e-mail: savakis@med.uoc.gr, Tel: 0030 2810 391114, Fax: 0030 2810 394530

Laboratory of Neurosciences

 Karagogeos, Domna, Assoc. Professor of Neurosciences, Ph.D., Harvard University.

Research interests: Molecular and cell biology of axon guidance and neuronal migration; functional studies of transcription factors in central nervous system development. Molecular organization of myelinated fibers. e-mail: karagoge@med.uoc.gr, Tel: 0030 2810 394542, Fax: 0030 2810 394530

## Laboratory of Pharmacology

• Gravanis, Achileas, Professor of Pharmacology, Head, Doctorat, University Pierre & Marie Curie 6.

Research interests: 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 enzymes.

e-mail: gravanis@med.uoc.gr, Tel: 0030 2810 394521, Fax: 0030 2810 394530

• Katerinopoulou-Thermos, Kyriaki, Assoc. Professor of Pharmacology, Ph.D., New York University.

Research interests: Role of somatostatin receptors in brain and retina; involvement in the pathophysiology of neurological and psychiatric disorders; neuroprotective role in retinopathy.

e-mail: thermos@med.uoc.gr, Tel: 0030 2810 394533, Fax: 0030 2810 394530

· Liapakis, Georgios, Assist. Professor of Pharmacology,

Doctoral degree, University of Crete.

Research interests: Elucidation of the structure and function of G-protein coupled receptors.

e-mail: liapakis@med.uoc.gr, Tel: 0030 2810 394525, Fax: 0030 2810 394530

 Zachariou, Venetia, Assist. Professor of Pharmacology, Ph.D., Medical College of Georgia.

Research interests: Role of Regulators of G protein signalling (RGS proteins) in Neuropsychiatric disorders; Signal transductions mechanisms in chronic pain; Genetic animal models for neurological and psychiatric diseases.

e-mail: vzachar@med.uoc.gr, Tel: 0030 2810 394527, Fax: 0030 2810 394530

## Laboratory of Basic Neurosciences

 Dalezios, Yannis, Assist. Professor of Physiology, Doctoral degree, University of Patras.

Research interests: Electron microscopy; physiology and anatomy of the oculomotor system; two-dimensional, high-resolution metabolic mapping of the monkey brain. e-mail: dalezios@med.uoc.gr, Tel: 0030 2810 394504, Fax: 0030 2810 394530

 Moschovakis, Antonios, Professor of Physiology, Ph.D., Washington University, St. Louis.

Research interests: Neurophysiology of ocular and limp movement; compartmental and neural network modelling of brain processes; tract tracing and neuron morphology. e-mail: moschov@med.uoc.gr, Tel: 0030 2810 394509, Fax: 0030 2810 394530

 Raos, Vassilis, Assistant Professor of Physiology, Doctoral degree, University of Crete.

Research interests: Neurophysiology: Visuomotor transformations for reaching and grasping movements in

premotor areas of the macaque monkey. Functional Brain Imaging: Neuronal circuits involved in execution and observation of grasping movements.

e-mail: vraos@med.uoc.gr, Tel: 0030 2810 394504, Fax: 0030 2810 394511

• Savaki, Eleni, Professor of Physiology, M.D., Doctoral degree, University of Athens.

Research interests: 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.

e-mail: savaki@med.uoc.gr, Tel: 0030 2810 394513, Fax: 0030 2810 394530

## Laboratory of Systems Physiology

• Christakos, Constantinos, Assoc. Professor of Physiology, Ph.D., Kings College-Chelsea College.

Research interests: Experimental and modeling studies of neuromuscular mechanisms and spinal motor systems; analysis and modeling of the function of the respiratory pattern generator.

e-mail: ccnncc@med.uoc.gr, Tel: 0030 2810 394502, Fax: 0030 2810 394530

#### 17.5.2 Internal Medicine

## **Cardiology**

 Vardas, Panagiotis, Professor of Cardiology, Head, Doctoral degree, University of Athens. e-mail: cardio@med.uoc.gr, Tel: 0030 2810 392422, Fax: 0030 2810 542055

- Parthenakis, Fragiskos, Assist. Professor of Cardiology, Doctoral degree, University of Crete.
   e-mail: fparth@med.uoc.gr, Tel: 0030 2810 392255/422,
   Fax: 0030 2810 542055
- Manios, Emmanouel, Assist. Professor of Cardiology, Doctoral degree, University of Crete.
   e-mail: mman@med.uoc.gr, Tel: 0030 2810 392835/422,
   Fax: 0030 2810 542055
- Kochiadakis, Georgios, Assist. Professor of Cardiology, Doctoral degree, University of Crete e-mail: kochiadg@med.uoc.gr, Tel: 0030 2810 392422, Fax: 0030 2810 542055
- Simantirakis, Emmanouel, Assist. Professor of Cardiology, Doctoral degree, University of Crete. e-mail: esimant@med.uoc.gr, Tel: 0030 2810 392422, Fax: 0030 2810 542055

Clinical electrophysiology of the heart; pathophysiology and therapeutics of the arrythmias; syncopal episodes of 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, Doctoral degree, University of Athens. e-mail: derma@med.uoc.gr, Tel: 0030 28100 392429-582, Fax: 0030 2810 392429
- Krasagakis, Konstantine, Assist. Professor of Dermatology, Dr., Freie Universitaet, Berlin. e-mail: krasagak@med.uoc.gr, Tel: 0030 2810 392429/30,

Fax: 0030 2810 392429

• Krueger-Krasagaki, Sabine-Elke, Assist. Professor of Dermatology, Dr., University of Freie Universitaet, Berlin. e-mail: krkras@med.uoc.gr, Tel: 0030 2810 392429/31, Fax: 0030 2810 392429

Tax. 0030 2010 372427

Allergic cutaneous vasculitis; skin cancer; photophysics and photobiology of the skin; cutaneous lymphomas.

#### **Endocrinology and Metabolic Diseases**

 Papavasileiou, Efstathios, Assoc. Professor of Endocrinology, Head, Doctoral degree, University of Athens.
 e-mail: papavasi@med.uoc.gr, Tel: 0030 2810 394556/392437. Fax: 0030 2810 392437

Reproductive endocrinology; diabetes mellitus; thyroid diseases; systems theory on endocrinology

## Gastroenterology

• Kouroumalis, Elias, Professor of Gastroenterology, Head, M.D., University of Athens, Ph.D., University of Dundee U.K.

e-mail: kouroum@med.uoc.gr, Tel: 0030 2810 392355/ 394634, Fax: 0030 2810 542085

 Kolios, Georgios, Assist. Professor of Gastroenterology, M.D., University of Athens, Ph.D., University of Bath U.K.

e-mail: gkolios@med.uoc.gr, Tel: 0030 2810 392253-356/542085, Fax: 0030 2810 542085

 Mouzas, Ioannis, Assist. Professor of Gastroenterology, Doctoral degree, University of Athens.

e-mail: mouzas@med.uoc.gr, Tel: 0030 2810 39254/356, Fax: 0030 2810 542085

· Koutroubakis, Ioannis, Assist. Professor of

Gastroenterology, Doctoral degree, University of Crete. e-mail: ikoutroub@med.uoc.gr, Tel: 0030 2810 392687/356, Fax: 0030 2810 542085

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. Quality of life in chronic disease; Alcohology.

## **Haematology**

• Samonis, Georgios, Professor, Head, Doctoral degree, University of Athens.

e-mail: haematology\_pepagni@freemail.gr, Tel: 0030 2810 392805/426, Fax: 0030 2810 392426

• Alexandrakis, Michail, Assoc. Professor, Doctoral degree, University of Athens.

e-mail: alexandm@med.uoc.gr, haematology\_ pepagni @freemail.gr, Tel: 0030 2810 392425/6, Fax: 0030 2810 392426

 Papadaki, Eleni, Assist. Professor, Doctoral degree, University of Crete.

e-mail: epapadak@med.uoc.gr, Tel: 0030 2810 392426,9/4637, Fax: 0030 2810 392426, 394632

Pathogenesis of chronic idiopathic neutropenias; immunemediated bone marrow failure; myelodysplastic syndromes; mesenchymal stem cell biology; immune abnormalities in multiple myeloma.

## Internal Medicine

• Boumpas, Dimitrios, Professor, Head, Doctoral degree, University of Ioannina.

e-mail: boumpasd@med.uoc.gr, Tel: 0030 2810 394635/

#### 2024, Fax: 0030 2810 394796, 392847

• Samonis, Georgios, Professor, Doctoral degree, University of Athens.

e-mail: haematology\_pepagni@freemail.gr, Tel: 0030 2810 392805/426, Fax: 0030 2810 392426

• Gikas, Achilleas, Assoc. Professor, Doctoral degree, University of Athens.

e-mail: gikas@med.uoc.gr, Tel: 0030 2810 375050, Fax: 0030 2810 392847

• Ganotakis, Emmanouel, Assist. Professor, Doctoral degree, University of Athens.

e-mail: ganotak@med.uoc.gr, Tel: 0030 2810 392360/59, Fax: 0030 2810 392847

• Goulielmos, George, Assist. Professor, Doctoral degree, University of Patras.

e-mail: gouliemos@med.uoc.gr; Tel: 0030 2810 394626

• Kofteridis, Diamantis, Lecturer, Doctoral degree, University of Crete.

e-mail: kofterid@med.uoc.gr, Tel: 0030 2810 392688, Fax: 0030 2810 392847

Atherosclerosis: pathogenesis and modulation. Autoimmunity. Familial Mediterranean Fever and other genetic diseases.

## Medical Oncology

• Georgoulias, Vassilios, Professor, Head, Doctoral degree, University of Athens.

e-mail: georgoul@med.uoc.gr, Tel: 0030 2810 392750/ 394573, Fax: 0030 2810 392802

• Mavrudis, Dimitrios, Assoc. Professor, Doctoral degree, University of Crete.

e-mail: mavrudis@med.uoc.gr, Tel: 0030 2810 392438/747,

Fax: 0030 2810 392802

Agelaki, Sophia, Lecturer, Doctoral degree, University of Crete.

e-mail: agelaki@med.uoc.gr, Tel: 0030 2810 392747, Fax: 0030 2810 392802

T-lymphocyte function; breast, lung and colorectal cancer; immune suppression; fungal infections in cancer patients.

## **Nephrology**

 Dafnis, Evgenios, Assist. Professor, Doctoral degree, University of Athens.

e-mail: eugenedaphnis@yahoo.gr, nefrolog@med.uoc.gr, Tel: 0030 2810 392418/392605

Biology of podocytes; mechanisms of glomerular immune injury; small vessel vasculitis.

## Rheumatology, Clinical Immunology and Allergy

• Boumpas, Dimitrios, Professor, Head, Doctoral degree, University of Ioannina.

e-mail: boumpasd@med.uoc.gr, Tel: 0030 2810 394635/2024, Fax: 0030 2810 394796/392806

 Sidiropoulos, Prodromos, Lecturer, Doctoral degree, University of Athens.

e-mail: sidiropp@med.uoc.gr, Tel & Fax: 0030 2810 394873, Mobile: 0030 6979794678

Autoimmunity and inflammation. Inflammatory pathways and signal transduction. Systemic lupus erythematosus and rheumatoid arthritis.

#### Thoracic Medicine

Siafakas, Nikolaos, Professor, Head, Doctoral degree,

University of Athens, Ph.D., University of London. e-mail: pneumon@med.uo.gr, siafak@med.uoc.gr, Tel: 0030 2810 392433, Fax: 0030 2810 542650

 Schiza, Sophia, Lecturer, Doctoral degree, University of Crete.

e-mail: schiza@med.uoc.gr, Tel: 0030 2810 392433, Fax: 0030 2810 542650

Tzortzaki, Eleni, Lecturer, Doctoral degree, University of Crete.

e-mail: tzortzaki@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. Chronic Obstructive Pulmonary Disease, Asthma, Idiopathic Interstitial Pneumonias.

## 17.5.3 Laboratory Medicine

<u>Laboratory of Clinical Bacteriology, Parasitology, Zoonoses</u> <u>and Geographical Medicine</u>

 Spandidos, Demetrios, Professor, Head, Ph.D., Mc Gill University.

e-mail: spandido@med.uoc.gr, Tel: 0030 2810 394633, 394831

- Tselentis, Yannis, Emeritus Professor, MD., University of Athens, Head of WHO Collaborating Center for Research and Training in Mediterranean Zoonoses. e-mail: tselendi@med.uoc.gr, Tel: 0030 2810 394739, Fax: 0030 2810394740
- Antoniou, Maria, Assist. Professor, Ph.D., London University.

e-mail: antoniou@med.uoc.gr, Tel: 0030 2810 394746, Fax: 0030 2810 394740

- Scoulica, Effie, Assist. Professor, Doctorat, University of AIX-MARSEILLE II France.
   e-mail:scoulica@med.uoc.gr, Tel: +30 2810394576,
   Fax:0030 2810394576
- Psaroulaki Anna, Lecturer, Doctoral degree, University of Crete.

e-mail: annapsa@med.uoc.gr, Tel:+30 2810394743, Fax: 0030 2810394740

Molecular mechanisms and epidemiology of bacterial antibiotic resistance and pathogenesis; research on leishmaniasis, toxoplasmosis, brucellosis, ricketsiosis; bartonellosis; anaplasmosis and other zoonotic infections; in vitro screening for new anti-microbial drugs; phylogenetic studies of environmental bacteria; microbiological 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, Doctoral degree, University of Athens.

e-mail: andym@med.uoc.gr, Tel: 0030 2810 394588

 Tsatsanis, Christos, Lecturer, Ph.D., 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

 Spandidos, Demetrios, Professor, Head, Ph.D.,Mc Gill University.

e-mail: spandido@med.uoc.gr, Tel: 0030 2810 394633, 394831

Hepatitis viruses; herpes viruses; AIDS viruses; cellular and viral oncogenes.

• Sourvinos George, Assistant Professor, Doctoral degree, University of Crete.

e-mail: sourvino@med.uoc.gr, Tel: 0030 2810 394 835

Study of localisation, dynamics and regulation of human cytomegalovirus (HCMV) genomes during lytic and quiescent infection; elucidation of role of CMV Immediate Early (IE) proteins at the formation of nucleoprotein complexes prior to viral DNA replication; mechanisms of establishment of quieascent infections and reactivation of HSV-I genomes.

## Laboratory of Experimental Endocrinology

 Castanas, Elias, Professor, Head, Doctoral degree, University of Athens; Doctorat, University Aix-Marseille II; 1981 University Aix-Marseille II; 1985 University Aix-Marseille II.

e-mail: castanas@med.uoc.gr, Tel: 0030 2810 394584/86, Fax: 0030 2810 394581

• Hatzoglou, Anastasia, Assist. Professor, Doctoral degree, 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, Doctoral degree, 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

0030 2810 394700

## Anatomy, Neuroanatomy and Embryology

- Karabelas, Athanasios, Assoc. ProfessorDoctoral degree, University of Patras.
- e-mail: karabel@med.uoc.gr, Tel: 0030 2810 394719, Fax: 0030 2810 394700
- Siatitsas, Ioannis, Assoc. Professor, Doctoral degree, University of Patras.
- e-mail: vssiatit@med.uoc.gr, Tel: 0030 2810 394716, Fax: 0030 2810 542039
- Myrillas, Petros, Assist.. Proffesor, Doctoral degree, University of Patras. e-mail: pmirilas@med.uoc.gr, Tel: 0030 2810 394836, Fax:
- · Paspalas, Konstantinos, Assist. Professor, Doctoral

degree, University of Thessaloniki.

e-mail: constantinos.paspalas@yale.edu, Tel: 0030 2810

394718, Fax: 0030 2810 394700

Neurobiology; neuroanatomy; embryology; microsurgery; educational methods in anatomy.

#### **Histology**

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- Tzanakakis, Georgios, Assoc. Professor, Head, Doctoral degree, University of Patras.
- e-mail: tzanakak@med.uoc.gr, Tel: 0030 2810 394719, Fax: 0030 2810 394719
- Zafiropoulos, Alexandros, Assist. Professor, Doctoral degree, University of Crete.

e-mail: zafeiros@med.uoc.gr, Tel: 0030 2810 394749, Fax: 0030 2810 394682

Dragana, Nikitovic, Assist. Instructor.
 e-mail: dnikitovic@med.uoc.gr

Human histology; ultrastructure and cell biology; techniques used in histology and cell biology; extracellular matrix; chondroitin and heparan sulfate proteoglycan biosynthesis and function; Hyaluronean; extracellular matrix and cancer cell interaction; role of proteoglycans in cancer and metastasis. Immunohistochemical analysis of proteoglycan components; Tissue mRNA and protein expression profiling.

#### **Pathology**

- Stathopoulos, Efstathios, Assist. Professor, Doctoral degree, University of Athens.
- e-mail: stath@med.uoc.gr, Tel: 0030 2810 394692, Fax: 0030 2810 394700
- Tzardi, Maria, Assist. Proferssor, Doctoral degree,

University of Crete.

e-mail: tzardi\_maria@yahoo.co.uk, Fax: 0030 2810 394694

• Kalogeraki, Alexandra, Assist. Professor, Doctoral degree, 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; immunohistochemistry.

## **Laboratory of Forensic Sciences**

- I. Department of Forensic Pathology and Medical Ethics
- Michalodimitrakis, Emmanouel, Assoc. Professor, Doctoral Degree, University of Athens.

e-mail: michalodi@med.uoc.gr, Tel: 0030 2810 394678, Fax: 0030 2810 394689

2. Department of Clinical and Forensic Neurobiology; neuroanatomy; embryology; microsurgery; educational methods in anatomy.

Medicine

• Steiakakis, Ioannis, Assist. Professor, Doctoral Degree, University of Athens.

e-mail: stiak@med.uoc.gr, Tel: 0030 2810 394660, Fax: 0030 2810 394660

Drug Abuse, Road Accidents, Rape, Child Abuse, Industrial Accidents, Assault and Battery 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

- 3. Department of Toxicology
- Tsatsakis, Aristides, Assoc. Professor, Head, Dr., Mendeleyev University.

e-mail: aris@med.uoc.gr, Tel: 0030 2810 394679, Fax: 0030 2810 542098

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

## Obstetrics and Gynaecology

- Koumantakis, Evgenios, Professor, Head, Doctoral degree, University of Athens.
- e-mail: obgyn@med.uoc.gr, Tel: 0030 2810 394591/3, 394598/9, Fax: 0030 2810 392759
- Makrygiannakis, Antonios, Assist. Professor, Doctoral degree, University of Crete.

e-mail: magkrigia@med.uoc.gr, Tel: 0030 2810 392333, Fax: 0030 2810 394796

• Mataliotakis, Ioannis, Assist. Professor, Doctoral degree, University of Thessaloniki.

e-mail: Matac@med.uoc.gr, Tel: 0030 2810 392331, Fax:

#### 0030 2810 392759

 Relakis, Konstantinos, Assist. Professor, Doctoral degree, University of Athens.
 e-mail: relakisk@med.uoc.gr, Tel: 0030 2810 392332, Fax:

0030 2810 394796

IVF; 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; gynecology oncology; endometriosis.

#### **Pediatrics**

Kalmanti-Papachatzi, Maria, Professor, Head, M.D.
 University of Athens, Doctoral degree, University of Athens.

e-mail: pedhem@med.uoc.gr, Tel: 0030 2810 392325, 392343, 394673/4, Fax: 0030 2810 392778

 Matzourani, Evangelia, Assoc. Professor, Head of Allergy Respiratory Immunology Unit, M.D., University of Athens.

e-mail: matzurani@med.uoc.gr, Tel: 0030 2810 394672, Fax: 0030 2810 392290

Cystic fibrosis, childhood asthma and rhinitis; pulmonary infections and asthma, upper and lower respiratory infections asthma; phenotypes of asthma; clinical outcome of primary immunodeficiences; association of rhinitis and asthma; asthma treatment following GINA guidelines, allergies (food, drug, insect, inhalants), allergic reactions, frequent respiratory infections, primary immunodeficiencies, autoimmune disorders.

Briassoulis, Georgios, Assoc. Professor, Head of Intensive

Care Unit, M.D., University of Athens. e-mail: ggbriass@otenet.gr tel: 0030 2810 375024, Fax: 0030 2810 392652

Critical illness; basic and advanced pediatric life support; shock; sepsis; respiratory distress; invasive non-invasive hemodynamic, respiratory, intracranial pressure monitoring; early enteral nutrition, immunonutrition.

• Galanakis, Emmanouil, Assist. Professor, Head of Infectious Diseases Unit, M.D., Medical School, University of Ioannina; Doctoral degree, Department of Philosophy, University of Ioannina.

e-mail: egalanak@med.uoc.gr, Tel: 0030 2810 392012, Fax: 0030 2810 392827

Epidemiology of infectious diseases; susceptibility to infections; host's response to infection.

• Germanakis, Ioannis, Lecturer, Head of Cardiology Unit., M.D., University of Crete. e-mail: germjohn@med.uoc.gr Tel: 0030 2810 392035 Fax: 0030 2810 392827

Congenital and acquired heart disease. Inborn errors of metabolism-organic acidurias; diabetes mellitus Type I; Electroencephalographic; learning disabilities; brain dysfunction in childhood; childhood epilepsy.

#### **Neonatology**

 Giannakopoulou, Christina, Assist. Professor, Head, Doctoral degree, University of Athens.
 e-mail: gianakop@med.uoc.gr, Tel: 0030 2810 392608

Supportive care of premature neonates; respiratory distress syndrome.

#### Pediatric Haematology - Oncology

- Kalmanti-Papachatzi, Maria, Professor, Head; Doctoral degree, University of Athens. e-mail: pedhem@med.uoc.gr, Tel: 0030 2810 394673/64, Fax: 0030 2810 394673
- Dimitriou, Eleni, Assist. Professor; Doctoral degree, University of Athens. e-mail: lena@med.uoc.gr, Tel: 0030 2810 394674, 394664, Fax: 0030 2810 394673
- Steiakaki, Eftichia, Assist. Professor; M.D., University of Crete.

e-mail: efstel@med.uoc.gr, Tel: 0030 2810 392852, Fax: 0030 2810 392778

Biology and Treatment of childhood malignancies, late effects of cancer chemotherapy; supportive care in immunosuppressed children; Bone marrow, PBSC and cord blood stem cells and transplantation; haematopoietic stem cells assays and biology; ,mesenchymal stem cell biology (isolation, characterization, differentiation), 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, apoptosis in childhood leukemia.

#### 17.5.6 Neurology and Sensory Organs

#### <u>ENT</u>

- Chelidonis, Emmanouel, Professor, Head, Doctoral degree, National and Kapodistrian University of Athens. e-mail: emmhelid@med.uoc.gr, Tel: 0030 2810 394655, Fax: 0030 2810 542106
- Bizakis, Ioannis, Assoc. Professor, Doctoral degree,

University of Crete.

e-mail: jbizakis@med.uoc.gr, Tel: 0030 2810 392347, Fax: 0030 2810 542106

- Velegrakis, Georgios, Assoc. Professor, Doctoral degree, University of Thessaloniki.
- e-mail: gvel@med.uoc.gr, Tel: 0030 2810 392680, Fax: 0030 2810 542106
- Christodoulou, Panagiotis, Assist. Professor, Doctoral degree, University of Crete.

e-mail: christop@med.uoc.gr, Tel: 0030 2810 392679, Fax: 0030 2810 542106

Laser thermo-chondroplasty; laser applications; hearing, balance and speech disorders in the population of Crete; otolaryngology of ancient Cretans; Kochlear Implants.

#### Neurology

- Plaitakis, Andreas, Professor, Head, M.D, Doctoral degree, University of Athens.
- e-mail: plaitak@med.uoc.gr, Tel: 0030 2810 394647/48, Fax: 0030 2810 394839
- Amoirides, Georgios, Assist. Professor, Ph.D., University of Ruhr-Bochum.
- e-mail: amoirid@med.uoc.gr, Tel: 0030 2810 392288/394651, Fax: 0030 2810 394839
- Spanaki, Kleanthi, Lecturer, Doctoral degree, University of Crete.

e-mail: kliospanaki@yahoo.com, Tel: 0030 2810 394651, 394647, Fax: 0030 2810 304839

Molecular basis of neurodegenerative disorders; Structure and function of human glutamate dehydrogenases; molecular biology of Huntington's disease; molecular biology of Parkinson's disease; pathogenesis of vascular

cerebral disorders; epidemiology and pathogenesis of multiple sclerosis; human inborn errors of metabolism; neurobiology of motor neuron disorders.

#### Neurosurgery

 Vakis, Antonios, Lecturer, Doctoral degree, 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; ongoing protocol comparing genetic, clinical and imaging data; +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, Dr., University of Zurich.
- e-mail: pallikar@med.uoc.gr, Tel: 0030 2810 322450, Fax: 0030 2810 542094
- Tsilimbaris, Miltiades, Assist. Professor, Doctoral degree, University of Crete.
- e-mail: tsilimb@med.uoc.gr, Tel: 0030 2810 392351, Fax: 0030 2810 542094
- Siganos, Charalambos, Lecturer, Doctoral degree, University of Crete.

e-mail: csiganos@med.uoc.gr, Tel: 0030 2810 392737, Fax: 0030 2810 542094

Refractive surgery; photodynamic therapy; ophthalmic

imaging; senile macular degeneration.

#### 17.5.7 Psychiatry and Behavioral Sciences

#### **Psychiatry**

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- Vgontzas, Alexandros, Professor, Head, Doctoral degree, University of Athens.
- e-mail: vgontzas@med.uoc.gr, Tel: 0030 2810 394617, Fax: 0030 2810 394617
- Paritsis, Nikolaos, Assoc. Professor, Doctoral degree, University of Athens; Ph.D, Brunel.

e-mail: paritsis@med.uoc.gr, Tel: 0030 2810 394610/16, Fax: 0030 2810 394617

• Bitsios, Panayiotis, Assist. Professor, Ph.D., 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 Nickolaos, Professor, Head, Doctoral Degree, University of Athens.
- e-mail: gournick@med.uoc.gr, Tel: 0030 2810 394684, Fax: 0030 2810 542095
- Karantanas Apostolos. Assoc. Professor of Radiology, Doctoral Degree, University of Ioannina.
   email: apolsen@yahoo.com, Tel: 0030 2810 392078, Fax: 0030 2810 542095

- Karampekios Spyridon, Assist. Professor, Doctoral Degree, University of Athens.
- e-mail: karampek@med.uoc.gr, Tel: 0030 2810 392539/542, Fax: 0030 2810 542095
- Yiarmenitis Spyridon, Assist. Professor, Doctoral Degree, University of Patras.
- e-mail: sdy@med.uoc.gr, Tel: 0030 2810 392561/542, Fax: 0030 2810 542095
- Hatzidakis Adam, Assist. Professor, Dr., University of Cologne.
- e-mail: adamhatz@med.uoc.gr, Tel: 0030 2810 392534/542. Fax: 0030 2810 542095
- Raissaki Maria, Lecturer, Doctoral Degree, University of Crete.
- e-mail: mariarai@her.forthnet.gr, Tel: 0030 2810 392542, Fax: 0030 2810 542095
- Tsetis Dimitrios, Assist. Professor, Doctoral Degree, University of Crete.
- e-mail: tsetis@med.uoc.gr, Tel: 0030 2810 392534/542, Fax: 0030 2810 542095
- Papadaki Efrosini, Lecturer in Radiology, Doctoral Degree, University of Crete.

e-mail: fpapada@hol.gr Tel: 00302810392542 Fax: 0030 2810542095

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**

- Damilakis, Ioannis, Assist. Professor, Head, Doctoral Degree, University of Crete.
- e-mail: damilaki@med.uoc.gr, Tel: 0030 2810 392569, 394686. Fax: 0030 2810 542095
- Maris, Thomas, Assist. Professor, Doctoral Degree, University of Athens.
- email: thmaris@med.uoc.gr, Tel:0030 2810 392797, Fax : 0030 2810 542095
- Perysinakis, Konstantinos, Assist. Professor, Doctoral Degree, University of Crete.
- e-mail: perisina@med.uoc.gr, Tel: 0030 2810 392564, 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, Nicholaos, Professor, Head, Dr., University of Goetingen.
- e-mail: karkavit@med.uoc.gr, Tel: 0030 2810 3925676, Fax: 0030 2810 542095
- Koukouraki Sophia, Assist. Professor, Doctoral Degree, University of Crete,

e-mail: sophiak@her.forthnet.gr,Tel. 0030 2810392565, 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**

 Varveris, Charalambos, Assist. Professor, Head, Doctoral Degree, 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**

- Chlouverakis, Gregory, Assoc. Professor, Head, Ph.D., State University of New York at Stony Brook. e-mail: biostats@med.uoc.gr, gchlouve@med.uoc.gr,Tel: 0030 2810 394613/00, Fax: 0030 2810 394606
- Moschandreas, Joanna, Assist. Professor, Doctoral degree, University of Crete.

Research Interests: Random effects models, survival analysis, intervention studies, clinical trials, quantitative genetics. Biostatistics lab provides consulting expertise and services in the development and application of statistical theory and practice to basic and clinical biomedical research. It supports the research of investigators by providing statistical input in experimental design, statistical modelling, data analysis and interpretation of results. e-mail: joanna@med.uoc.gr, Tel: 0030 2810

e-mail: joanna@med.uoc.gr, Tel: 0030 2810 394613/394600, Fax: 0030 2810 294606

 Philalithis, Tassos, Assoc. Professor, Acting Head, Doctoral degree, University of Athens.
 Research Interests: Multivariate analysis of continuous and discrete data; large-scale epidemiological and clinical studies of the Cretan population; establishment of cancer registry in Crete.

e-mail: biostats@med.uoc.gr, Tel: 0030 2810 394613/37, Fax: 0030 2810 394606

#### **Environnental Epidemiology**

 Kogevinas, Manolis, Professor, PhD., University of London.

Research Interests: Environmental and occupational cancer; occupational asthma; gene interactions.

e-mail: kogevinas@med.uoc.gr, Tel: 0030 2810 304612, Fax: 0030 2810 394606

#### Health Planning

• Philalithis, Tassos, Assoc. Professor, Head, Doctoral degree, University of Athens.

Research Interests: Health services research; health needs and outcome assessment; organisation, planning and evaluation of health care systems.

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#### History of Medicine and Medical Ethics

• Trompoukis Constantinos, Lecturer, Doctoral degree, University of Athens.

Research Interests: Evolution of modern medicine, Ancient and Byzantine medicine, history of medicine in East Meditteranean, history of hospital, history of medical ethics and deontology.

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#### Preventive Medicine and Nutrition

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 Tzanakis, Nikolaos. Assist. Professor, Doctoral degree, University of Thessaloniki.

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Nutrition and hyperlipidemias; nutrition intervention in chronic and acute diseases; epidemiology respiratory diseases.

#### Social and Family Medicine

• Lionis, Christos, Assoc. Professor, Head, Doctoral degree, University of Crete.

Research Interests: Primary health-care, family medicine and general practice; clinical effectiveness; quality of care. e-mail: lionis@med.uoc.gr, Tel: 0030 2810 394621, Fax: 0030 2810 394606

## 17.5.10 Surgery

#### **Anaesthesiology**

 Askitopoulou, Eleni, Professor, Head, Doctoral degree, University of Athens, DA, FRCA.

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#### **General Surgery**

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#### 0030 2810 542063

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- Chrysos, Emmanouel, Assist. Professor of Surgery, Doctoral degree, University of Crete.

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Gastrointestinal motility; advanced laparoscopic surgery; cryoablation for liver neoplasias (primary-metastatic); Liver, pancreatic surgery - geriatric surgery. European project for Diagnosis and Neuronal Analysis for skin cancer - DANAOS.

#### Intensive Care

- Georgopoulos, Dimitrios, Professor, Head, Doctoral degree, University of Thessaloniki.
- e-mail: georgop@med.uoc.gr, Tel/Fax: 0030 2810 392636
- Kondili, Eumorfia, Lecturer, Pneumonologist / Intesivist, MD, PhD. University of Crete.

e-mail: konde@med.uoc.gr, Tel: 0030 2810 392585, Fax: 0030 2810 392636.

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

• Hadjipavlou, Alexander, MD, FACS, FRCS(c) Professor, Head, Doctoral degree, University of Athens.

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- Kontakis, George, Assist Professor, Doctoral degree, Unversity of Crete.

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Osteoporotic fractures; degenerative arthritis; biomechanisms; open fractures, scoliosis.

#### Pediatric Surgery

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Pediatric endocrinology; perinatal surgery; computer systems in health sciences.

#### Surgical Oncology

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- University of Athens. e-mail: romanos@med.uoc.gr, Tel: 0030 2810 392385, Fax: 0030 2810 542059

· Romanos, John, Assist. Professor, Doctoral degree,

Regional chemotherapy; melanoma; plastic surgery; medical informatics in clinical surgery; Morbid obesity, colon and Rectal endocrine surgery.

#### **Urology**

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Urooncology, Endourology, Incontinence, Lithisasis.

#### Vascular and Cardiothoracic Surgery

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- Hassoulas, Ioannis, Assoc. Professor of Cardiac Surgery, Doctoral degree, University of Athens.
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• Ioannou, Christos, Lecturer in Vascular Surgery, MD, Doctoral degree, University of Thessalonica. e-mail: ioannou@med.uoc.gr, Tel: 0030 2810 392393, Fax: 0030 2810 542063

Assessment of subclinical atherosclerotic disease; Cardiac assist devices for permanent use-power source. Haemodynamic evaluation of venus diseases; optic fibre for laser angioplasty in angiographic catheters; detection of lung and pleura tumours by laser emission tomography.

## Specialized Teaching Staff for the Faculty of Medicine

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- Ventura, Natalie, B.A. Columbia University, M.A. in Education, Columbia University.
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#### 17.6 THE UNIVERSITY HOSPITAL

Medicine.

# 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

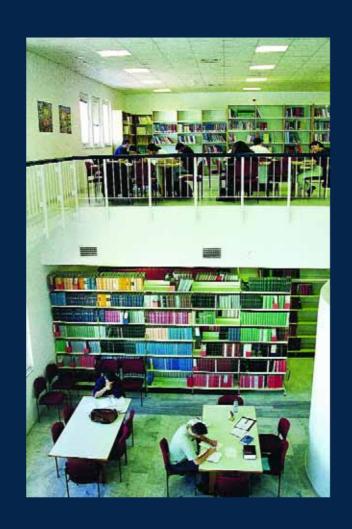
catalytic role in the Hellenic Medical Students' International Committee (Hel.M.S.I.C.), which was founded in the early 1950s and is a non-profit, non-political, non-governmental student organization. It has been a full member of I.F.M.S.A. since 1958. I.F.M.S.A. is recognized by the W.H.O. as the official 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).

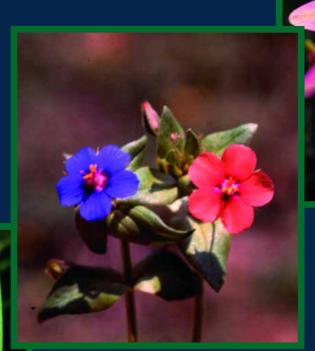
#### 17.7.3 EEFIE, Scientific Society of Medical Students

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., loannina 2002; Athens 2003).











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