

Undergraduate Prospectus

University of Cyprus

Undergraduate Prospectus 2022-2024

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## Coordination/Editing:

Corinna Kiliari, University Officer Publications Office, PDS

## Design/Layout:

Maria Gavriel, Graphic Designer
Publications Office, PDS

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## RECTOR'S MESSAGE



Dear students,
Studies are essential for succeeding in the demanding labour market. A degree from a recognized and reputable institution, such as the University of Cyprus (UCY), gives alumni prestige and instills confidence in employers.

The undergraduate programmes of the University of Cyprus provide quality teaching and learning and are compliant with European and international standards. Students are a vital part of the university community; an active group of young students and researchers, academics and administrative staff who aim for excellence and success through dedication to teaching, learning research and innovation.

Apart from professional training in the field of studies, what is important in this era of specialization is the holistic development of one's personality. Equipping our students with the necessary skills, as well as offering them efficient career-path preparation are a priority for the University of Cyprus. Attending courses and actively participating in the UCY student life enables you, our students, to learn, and also understand that knowledge acquisition requires constant effort. Activities, seminars, conferences, and events provide opportunities for further training and discussion regarding new job market trends, and matters that challenge our society and the world in general. Using digital transformation and technology for learning and networking adds value to your studies, while you acquire new, invaluable skills for your future career.
Recognizing the value of internationalization, the University of Cyprus intensifies its presence in the global scientific forefront both through publications and research, as well as through actions that promote student mobility. It is worth mentioning that UCY is a full member of the Young Universities for the Future of Europe (YUFE) alliance, one of the 17 first European universities that proposes a new enhanced synergy among other European academic institutions. YUFE is the alliance of ten young universities from ten countries. The participation of UCY in the YUFE alliance adds to the international profile of UCY and helps our students communicate more easily and flexibly with fellow students from partner universities more easily and flexibly.
Despite being a relatively young university, founded in 1989, the University of Cyprus has been established locally and internationally as a higher academic institution providing high quality programmes of study, producing high-level research, and making significant contributions to the development of our society. Therefore, you should take pride in being members of a young university with the potential and vision to continue on an upward trajectory.
This edition is a useful guide for current and prospective students. It includes important information regarding the UCY operations, the programmes of studies, and the infrastructure of the university, as well as the opportunities for students to participate in a wide range of activities.
My advice to you is to take full advantage of all the possibilities and opportunities that UCY has to offer; in order to learn, make the most of and embrace university life. This will be your greatest asset while entering the new world that will unfold before your eyes, upon completion of your studies at the University of Cyprus.


Professor Tasos Christofides, Rector


## GENERAL INFORMATION



## GENERAL INFORMATION

The University of Cyprus was founded in 1989 as the first pubic university of the country, and admitted its first students in 1992. The University of Cyprus aspires to become a pioneering research institute of international recognition with competitive curricula, as well as a centre of excellence in the wider European area. The University's main objectives are to promote education and knowledge through teaching and research and, at the same time, contribute to the socioeconomic and cultural growth of Cyprus. The University is a vigorous community of academics engaged in the generation and diffusion of knowledge and has earned the respect of the international academic community and the appreciation of the Cypriot society.

## Main Objectives

The main objectives of the University of Cyprus are twofold: the promotion of scholarship and education through teaching and research, and the enhancement of the cultural, social and economic development of Cyprus. In this context, the University believes that education must provide more than the simple accumulation of knowledge. It must also encourage students' active participation in the process of learning, as well as the acquisition of those values and life skills necessary for responsible and active involvement in the society. At the same time, the University sets high standards, through the research programmes of its departments, aiming for the foundation and growth of all branches of scholarship and their dynamic utilization both at a local and an international level.

## Research Activity

Original research is one of the primary activities of the academic staff. Undergraduate and postgraduate students, as well as research assistants may be involved in the research process.
The research programmes of the University of Cyprus cover a wide range of topics in accordance to the already existing specializations of the academic departments and research units. Some of these programmes are funded by European frame programmes (such as the HORIZON 2020, incl. ERC and Marie Sklodowska-Curie Actions, ERASMUS+, INTERREG, LIFE, COST, EEA GRANTS) and others by national competitive programmes (for example, the A. G. Leventis Foundation and the Research and Innovation Foundation), which fund the majority of external research programmes. For the success of its academics in research and innovation, the University of Cyprus has been nominated for international awards in various domains and it is placed in extremely honourable positions worldwide.
The University, within the framework of its social contribution, cooperates with various institutions in Cyprus on research projects aiming specifically at the needs of local industry and the economy in general.

## Research Centres/Units

A number of research centres and units operate at the University of Cyprus as non-profit organizations committed to conducting rigorous and innovative research. The research centres and units aim at developing research at a local, European and international level in their specific scientific fields and attract a large number of research projects funded by research and innovation funding organizations locally, at the EU and abroad. Research projects that apply directly to Cyprus are of vital importance, as they make a significant contribution to Cypriot economy and society by enabling the improvement of the economy and by tackling the major societal challenges that Cyprus is facing.

The following research centres/units operate at the University:

- Archaeological Research Unit
- Centre for Applied Neuroscience
- Centre for Banking and Financial Research
- Centre for Gender Studies
- Centre of Excelllence in Biobanking and Biomedical Research, biobank.cy
- Centre for Medieval Arts \& Rituals (CeMAR)
- Economics Research Centre
- EMPHASIS Research Centre
- International Water Research Institute "NIREAS"
- KIOS Research and Innovation Centre of Excellence
- Modern Greek Studies Research Centre
- Oceanography Centre
- Research Centre for Sustainable Energy - FOSS
- The Cyprus Neuroscience Research Unit (CNRU)
- University of Cyprus Centre for Field Studies


## The Academic Staff

The academic staff comprises of Cypriots, Greeks and international scholars that have been distinguished in renowned universities of Europe, the USA and other parts of the world.

## Governing Bodies

The University is a public corporate body. It is governed by its Council that takes decisions on strategic matters. The University is also responsible for the management of the administrative and the financial affairs of the University, as well as the Senate, that is the highest academic body of the University. The Faculties and Departments are administered by Boards; each Faculty is headed by a Dean and each Department is headed by a Chairperson.

## Administrative Services

The Director of Administration and Finance is the head of the following Administrative Services:

- Academic Affairs and Student Welfare Service
- Financial Services
- Human Resources Services
- Information Applications Service
- Internal Audit Service
- International Relations Service
- IT Infrastructure Service
- Library
- Research and Innovation Support Service
- Technical Services
- University Development Service

The Administrative Services provide the infrastructure and support required for the implementation of the University Council's and the Senate's decisions and policies.
The Director of Administration and Finance is a nonvoting member of the University Council and the Senate and carries out their decisions.

## UNIVERSITY BUILDINGS - MAPS

The University of Cyprus building premises are mainly located at the new University Campus in Athalassa and at the old Central Campus (Academia). The University owns or rents other buildings throughout Nicosia in order to cover its housing needs until the full development of the Athalassa Campus. Upon completion, the University Campus will accommodate 10.000 students in total. The following link www.ucy.ac.cy/maps-en includes maps showing the University Buildings. These maps guide those interested in locating all entities within the University of Cyprus (Departments/Faculties/Services).

## CAMPUS SERVICES

A number of bank branches, shops, a book store, a hairdressing salon, restaurants, canteens and cafeterias operate within the UCY premises, which serve the University community as well as the visitors.

## LIBRARY

The mission of the University of Cyprus Library is to support the University's goals by providing high-quality scientific information in all its pursuits to achieve its strategic objectives in research, teaching, knowledge dissemination and contribution to society.

## Premises

The Library located at the Learning Resource Centre "Stelios loannou" in the University Campus. The building houses all Library functions, services and collections, which spread to five levels combining stacks, reading rooms, work stations, study areas, a 24 -hour reading area, as well as a Children's Section in a dedicated, specially designed area. The building has more than 900 seats for studying in all levels, including 31 four-seat and six-seat group study rooms.
The 24-hour reading area is located on the ground floor and it is open seven days a week, 365 days a year.
The only Library brunch that remains is the non-lending collection of the Archaeological Research Unit, located at 12 Gladstonos Street, Nicosia.

## Information Sources

The Library has information sources in both print or other physical form (e.g. audiovisual material) and electronic form. Access to online resources is provided through paid subscriptions, either through the Library's participation in the Cypriot Libraries Consortium or through individual purchases. The Library also provides access to information sources that are available free on the World Wide Web. All Library material is searchable through its catalogues that are accessible from its website (http://library. ucy.ac.cy/), while access to the full-text (ebooks, e-journals, databases, etc.) is given to users connected to the University network. More specifically, the Library collection includes:

## Books

More than 400.000 volumes of print books, organized according to the Library of Congress classification system, all searchable through the online Library catalogue.

## Electronic Books

More than 620.000 electronic books, accessible from the Library catalogue or website.

## Databases

More than 320 databases in various fields, including bibliographic databases, databanks, statistical and financial databases, full-text collections, etc., 190 of which are current subscriptions, while the rest are either noncurrent subscriptions or databases freely available on the Web.

## Print Journals

More than 7.170 ( 90.000 volumes) titles of print journals, in Greek and in other languages, all current and noncurrent, searchable through the Library catalogue.

## Electronic Journals

More than 30.000 titles of online journals, accessible from the Library website.

## Digital Collections

These collections include digitized archives material (print, audio, photographic, video) and aim to preserve rare material and render it accessible to all academic community members, as well as to the broader society. They are accessible from the Library website through the digital repository of the Library "LEKYTHOS".

## Reference Material Collection

Beyond the online reference collections, the Library also provides print reference material (encyclopedias, dictionaries, etc.) for use within the Library. This material is located on the ground floor and is searchable through the Library catalogue.

## Audiovisual Material Collection

The collection includes CDs, DVDs, maps, audio cassettes, microfilm, microfiche, etc. The collection is searchable through the Library catalogue.

## Services to Users

## Library Use

All members of the University of Cyprus (students, academic, research and administration staff), as well as external members, can use the reading areas and material of the Library. Non-member visitors can only use the Library premises.

## Lending Services

Undertake the availability of print material to users: checkouts, renewals, returns, reservations, recalls, handling of questions regarding circulation, fines management, etc. All University members may borrow material upon presentation of their valid University card. For most services users can serve themselves utilizing the self-checkout and self-check in stations located in the Library, as well as their library account (My Library), accessible through the online catalogue.

There are Self-Checkout Stations in all five levels of the Library for students to check out books themselves, as well as a Self-Return System near the Library entrance allowing students to return books on a 24 -hour basis.

## Inter-Library Loan Services

Undertake the provision of books, journal articles, conference proceedings, conference presentations, etc. that are needed for research or teaching purposes and which are not included in its collection. For this purpose, the Library collaborates with several international library networks based in Greece, France, the United Kingdom, Germany, etc. In this framework, the Library also sends books and articles to other libraries in Cyprus and abroad.

## Printing Services

There are copying machines in all five levels of the Library for students to print, copy and scan documents. For use of this equipment the University card is required, which can be credited at the credit machine located on the Ground Floor.

## Lockers

There are lockers on the Ground Floor of Learning Resource Centre - "Stelios loannou" Library in which users can place, for a small fee, personal items. The University card is required for locker use.

## Services to Blind and Visually Impaired Users

As of 2000, the Library operates a dedicated workstation for visually impaired users. In collaboration with teaching
staff and the School for the Blind, the Library converts, upon request, class material to digital or large-font form in order to facilitate the study for users who are visually impaired.
As of 2005, the Library is member of the DAISY Book Consortium.

## Research Assistance

## Information Literacy

The Library holds educational seminars to familiarize users with its collections, resources and services. The seminars aim to help students and academics develop and enhance their information literacy skills so that they can benefit fully from the Library's resources.

## Bibliographic Management Tools (RefWorks, etc.)

Tools for the management of bibliographic references are available on the Library website. They allow users to directly import to a personal database bibliographic references from online databases and websites, to create and organize their bibliographies, to format their bibliographic references (e.g. MLA, APA, Chicago Manual of Style), etc.

## Ask a Librarian

The service is accessible from the Library website and is available to both the academic community of the University of Cyprus and external users.

## AskLive

Users can use the AskLive Service to ask brief and specific reference questions related to the collections, resources and services of UCY Library. Replies are sent via real-time chat.

## By Appointment

Users can schedule a research consultation appointment for personal assistance in a variety of areas: to find appropriate print and electronic information sources on a particular topic; to become familiar with the Library catalogue and collections; to learn how to use library resources and tools, including library catalogues, databases, other electronic resources, RefWorks, etc.
The service is available primarily to members of the academic community of the University of Cyprus and, as time permits, to external users.

## European Documentation Centre (EDC)

The European Documentation Centre (EDC) of the University of Cyprus was established in 2012, in order to provide information about the European Union's legislation and institutions. It forms part of a network of 400 documentation centres that were established by the European Commission after 1960.

The EDC of the University of Cyprus is open to members of the Academic and the wider community during the Library's working hours. Its collection includes printed material and online resources regarding the EU and its policies, such as official publications, annual reports, journals, statistical and economic databases, bibliographies, textbooks and pamphlets, etc. Monographs and print journals are searchable through the Library catalogue.

## Library's Research Programmes

From 2009 onwards the Library through its participation in European research projects (OpenAire, PASTEUR4OA, FOSTER, NI40S-Europe, Yufering, DIOSI, CeOS_SE) and international networks (LIBER, IFLA, YERUN) has been following and promoting European policies for the Open Science Aspects. At the same time, it plays a key/crucial role in the national policy making of scientific information in the Republic of Cyprus. The Library is also acting as the only National Open Access Desk (NOAD) of the country (OpenAire), providing support and training to the academic community of the wider public for all Open Science Aspects.

## IT INFRASTRUCTURE SERVICE

## User Accounts

All students need to have a university account (username/ password) in order to access the IT systems of the University of Cyprus such as the email, the IT labs, the Banner student registration system, the Blackboard elearning system, the VPN service, the ucywifi wireless network, the eduroam European Universities wireless network, etc. The students bare responsibility for the correct use and safety of their account, which they can create themselves from the self-registration link www.ucy.ac.cy/register. All students are provided with tools for the management of their accounts (password change, forgotten password change through answering predefined questions, forgotten username recovery) via the link https://iam.ucy.ac.cy.

## Email and collaboration tools

All members of the University community have a personal email address of the format <surname>.<name>[.XX]@ ucy.ac.cy. Access to the email service is provided via the www.office.com portal using the username (username@ucy.ac.cy) and password of their account. From the same portal, students have access to collaboration tools such as 1TB space on Onedrive, the Office package (Word, Excel, PowerPoint, Outlook which the student may install in up to 5 computers and/or 5
mobile devices/tablets) and many other collaboration tools such as Teams, OneNote, Forms and Yammer. Electronic Storage and Tools Services.

## Open Access PC Labs

Labs and personal computers as well as printing facilities are available for use by the University community. These are equipped with a wide variety of teaching software and are available for project work and teaching purposes.

## Multimedia and Videoconference

Specialized video conference systems are available for communication, tele collaboration and research as well as multimedia systems utilized for teaching and research purposes. Audiovisual material production and management are also provided for e-learning, teaching and research and for audiovisual coverage of events.

## Network Services

High-speed network access to the internet and other network services are provided.

## Wireless Network

Wireless network is available in all buildings of the University. It is used to support lectures, conferences, seminars and many different events.

## Residential Halls - Network Services

Network services are available in all rooms of the residential halls.

## Remote Access Service (VPN)

This service allows authorized University users secure access to the University's intranet from wherever there are internet facilities. The user, therefore, has access to all University online resources (e.g. the library's electronic journals).

## Telephony Integrated Services

Integrated Services include telephony, electronic fax, softphone and voice mail. An important telephone service is the Call Centre, which provides callers with up-to-date information on the University.

## Data Security and Protection Service

The University network and core systems are monitored in order to detect anomalies and prevent security risks and malicious behaviour. It also investigates all security incidents.

## Helpdesk

Telephone support is available for all central services of the IT Infrastructure Service. Our goal is to offer efficient and immediate support related to IT systems.

## INFORMATION APPLICATIONS SERVICE

## E-Learning

Students who register for courses using the e-learning system are able to access all course material using their personal accounts.

## Educational Services

At the beginning of the academic year the Information Applications Service offers intensive educational seminars on the use of web applications and the e-learning system. Interested students may register online at www.ucy.ac.cy/ issrequests.

## E-University

E -University aims at providing automated and qualitative services to the University academic community, exterior contracting institutions and the wider society. These services are focused on the qualitative support of research and teaching through the use of information technology in order to establish a functioning Electronic University (e-University). This requires both the design of new processes and the adoption of a new working mentality. Users can access these services via the university portal at https://portal.ucy.ac.cy.

## INTERNATIONAL RELATIONS

International relations play a crucial role in the promotion of the University of Cyprus abroad, resulting in its good reputation internationally for the quality of both research and teaching. Realising its importance, the University's Rectorate has placed internationalisation at the top of its strategic goals. Internationalisation at the University of Cyprus is achieved through a range of activities.
The University of Cyprus is an active member in more than 60 university networks/associations worldwide, both at an institutional and departmental level, including the European University Association (EUA), the Association of Mediterranean Universities (UNIMED), the Network of Universities from the Capitals of Europe (UNICA), the SGroup Universities in Europe, the Network of Young European Research Universities (YERUN), the European Association of Erasmus Coordinators (EAEC), the Association of Commonwealth Universities (ACU) and others.
The University has also signed Bilateral Agreements of Cooperation with more than 130 universities/research
institutions in Europe, Australia, the Middle East, Asia, USA, Canada and Africa. These agreements, facilitate student and academic staff exchanges, joint research projects, conferences and exchange of teaching and research material. Additionally, the University offers three joint degree programmes (at Masters' level) in collaboration with other European institutions (e.g. the University of Athens - Greece, Wageningen University Netherlands, etc.). Moreover, the University of Cyprus has signed a number of Cotutelle agreements with institutions abroad.
Student and staff mobility is a major tool of the internationalization strategy of the Institution. The University has been participating in the Erasmus+ Programme since the academic year 1997/1998 and in the Erasmus+ International since 2015/2016. Exchanges can also take place within the framework of Bilateral Agreements of Cooperation.
Organizing summer schools, with student participation from abroad and in collaboration with academics from partner institutions, contributes significantly to the internationalization of the institution. Throughout the year, the University welcomes delegations from international organizations, diplomatic delegations of other countries to Cyprus, as well as Cypriot diplomats based abroad and student organizations of the Diaspora.
An important recognition of the impact of the University of Cyprus in the international arena, was the establishment of the the Aula Cervantes on the University's premises in 2011 (as decided by the Headquarters of the Instituto Cervantes in Madrid). In addition to that, the Confucius Institute was also established in 2014, the first to be established in Cyprus and the first HSK (Hanyu Shuiping Kaoshi) Centre on the island. Moreover, an important aspect of the University's efforts towards internationalisation, is the recruitment of international students. With a large number of postgraduate programmes offered in English, the University aims to increase its number of international students in the coming years.
Another important development for the University of Cyprus internationally, is its participation in the Young Universities for the Future of Europe (YUFE) Alliance. The Alliance is comprised of ten young universities and four associate partners from the higher education, nongovernmental and private sector. Together, the YUFE partners will establish one of the first true European Universities, a single European University with various campuses across Europe offering a European University degree based on a combination of academic, professional and civic skills.
Its international outlook has ranked the University of Cyprus 84 in the Top 200 World Universities under 50 years old Category of the Times Higher Education World University Rankings 2020.

## CULTURAL EVENTS/LECTURES

The University of Cyprus organizes a variety of public events with topics of special scientific and wider interest. In addition, it organizes lectures, cultural activities, exhibitions, awards, concerts and book presentations, open to the general public.

It also works closely with cultural institutions to promote culture and the arts in the academic and student community.
For 23 years, members of the academic community have been lecturing at the Zenonion Free University in cooperation with Larnaca Municipality, the lerokipion Free University of the Municipality of Geroskipou, the Free University of Polis Chrysochous, the Salaminion Free University of Famagusta and the Tamasio Free University of Episkopio.
The dynamic participation that the University of Cyprus has established in the cultural and intellectual life of Cyprus, is a presence that expands in parallel with the development of basic programmes of teaching and research.

## PUBLICATIONS

In order to provide comprehensive information to the public, the students and to prospective students, as well as to the international academic community, the University of Cyprus produces a wide range of publications. For further information on the University's publications, please visit the website at www.ucy.ac.cy/ publications/en

The Cyprus University's input in the publishing activity was enhanced with the dynamic contribution of the Cyprus University Press (www.ucy.ac.cy/pek). The main objective of the Cyprus University Press is to support and promote the writing activity, not only in Cyprus and in Greece, but internationally as well.

## CULTURAL CENTRE "Michalis Pieris"

The Cultural Centre "Michalis Pieris" of the University of Cyprus is located at the Axiothea Mansion, in the historic centre of Nicosia. It is an internationally acknowledged institution that promotes culture and the arts as part of academic education, celebrates cultural diversity, encourages the involvement of students, as well as alumni of the University, in cultural and artistic activities, cherishes the traditions of Cyprus and the wider EuroMediterranean region, and fosters the universal values of European civilization.
With its activities, the Cultural Centre pursues the twofold mission of adding a holistic perspective to traditional academic education, and promoting Euro-Mediterranean culture as a common asset, which has been accumulated through centuries of interaction among nations. The first part of the mission is achieved through the Theatrical Workshop of the University of Cyprus (THEPAK), which complements academic education and literary research by involving students in the stage presentation of known or less familiar masterpieces of Greek literature that have as a common denominator the idiomatic language of peripheral Hellenism. By applying interactive approaches to literary research and re-enacting poetry, fiction and non-fiction as drama, THEPAK deepens students knowledge, understanding and appreciation of literature, while contributing to the general promotion and modern reception of valuable works of Greek literature in Cyprus and abroad.

The publishing activity of THEPAK and the Cultural Centre also fits within this context. A series of ten volumes dedicated to the plays staged by THEPAK and to their authors, have already been published. They contain the full text of each theatrical adaptation, biographical notes on the authors, and a rich selection of the most important research studies on their works. For further information on these publications, please visit the website at: www.ucy.ac.cy/cucentre/en/publications
The second part of the Cultural Centre's mission is achieved through the annual Cultural Festival of the University of Cyprus, which aims at promoting culture and the arts, and at encouraging the creative endeavours of certain established but primarily emerging noncommercial artists from Cyprus, Europe and the broader Mediterranean region, thus enriching the cultural agenda of Cyprus with high-quality performances that enhance the perception of the Euro-Mediterranean region as a common cultural area.

# studies \& student life 




STUDIES AND STUDENT LIFE


## STUDIES AND STUDENT LIFE

The undergraduate programmes of study at the University of Cyprus are based on the European Credit Transfer and Accumulation System (ECTS). According to the analytical academic programmes of the various departments both B.A. and B.Sc. degrees require the completion of at least 240 ECTS. The 240 ECTS include credit units from three or more elective courses (not included in the student's specialization) which should be taken from two or three different faculties of the University depending on the department.
All undergraduate programmes require two or three courses in a foreign language. The student's performance in the foreign language is included in the average mark.
The academic year comprises of two semesters. Eight semesters are normally required for graduation, but in special cases the duration of studies may be extended to a maximum of twelve semesters. Additional courses are also offered during the Summer Semester. Attendance is compulsory. The languages of instruction are Greek and Turkish (the official languages as stipulated by the Constitution of the Republic of Cyprus). In the Department of English Studies, the Department of French and European Studies and the Department of Turkish Studies classes are taught in English, French and Turkish respectively.
Each year around 1500 undergraduate students enter the University of Cyprus. Today there are approximately 5300 undergraduate students.

## Fees

The fees for Cypriot students and students admitted from EU countries total $€ 1.709$ per semester and they are paid by the State. The fees for foreign students total $€ 3.417$ per semester.

## Pancyprian Examinations

Admission for the majority of the students that enter the University of Cyprus is based on the Pancyprian Examinations set by the Cyprus Ministry of Education, Culture, Sports and Youth.

## Eligibility

Those eligible to participate in the examinations are Cypriot citizens or those with at least one parent of Cypriot origin. Prospective students must have graduated from a six-year high school, and have completed the necessary application forms within the time limits set by the Cyprus Ministry of Education, Culture, Sports and Youth.
Additionally, students who are studying in the final year or have graduated from upper secondary schools (upper secondary level), operating legally in a foreign country, provided that the Leaving Certificate which is going to be acquired or which has already been required, entitles admission to respective institutions of higher education of that country.
Moreover, EU nationals and third country nationals who are studying in the final year or have graduated from a public or private upper secondary school (upper secondary level) in Cyprus, recognized and registered by the Cyprus Ministry of Education, Culture, Sports and Youth, are eligible to participate in the Pancyprian Examinations.

## Right to claim and hold a position at the University of Cyprus

The candidates who take all the necessary papers to the department they apply to, have the right to claim a position at the University of Cyprus. For male candidates who secure a position at the University of Cyprus and cannot attend due to their service in the National Guard, their entry is deferred for the academic year that begins after their release from the National Guard.

## Registration

Those who secure a position at the University of Cyprus must complete a special application online form according to instructions issued during notification of results.

## Admission by Special Criteria

Candidates who take the Pancyprian Examinations and who meet specific special criteria set by the Regulations and Rules for Studies and Student Affairs, can claim for a limited number of positions (up to $14 \%$ of the Cypriot
applicants). These positions are offered to candidates who belong to families with special circumstances (e.g. children of disabled parents due to acts of war, children of missing persons, persons living in the occupied area of the country, etc.), candidates with disabilities (e.g. quadriplegics, paraplegics, blinds, etc.) and candidates belonging to other special categories (e.g. athletes with distinctions, parents of underage children, etc.). Admission is open only to candidates who achieve a certain minimum grade at the Pancyprian Examinations.

## Admission by International Examinations

Cypriots belonging to the Religious Groups of the Republic of Cyprus (Armenians, Maronites, Latin), Cypriots with dual citizenship, repatriated Cypriots, Cypriots who are permanent residents in other countries, children of foreign service officers of Cyprus, Greeks of the Diaspora, EU nationals and non EU nationals can claim a limited number of positions ( $3 \%$ of the admitted Cypriot students) based on GCSE/GCE, International Baccalaureate or other equivalent examinations.
For further information, please visit the Academic Affairs and Student Welfare Service's website at www.ucy.ac.cy/fmweb/en.

## Entrance Examinations by the Ministry of Education in Greece

A limited number of positions ( $10 \%$ of the total number of admissions) are offered to candidates that participate in the entrance examinations set by the Ministry of Education of Greece. The candidates must fill in the application form of the University of Cyprus and the positions are offered based on their entrance examinations results. These examinations can also be taken by Cypriots residing in Greece.

## Turkish Cypriots

Turkish Cypriots who hold a six-year high-school Leaving Certificate or who succeed in special written or oral examinations organized by the departments, are eligible for admission to the University of Cyprus.

## Candidates with Athletic Distinctions and Distinguished in the International Olympiads

High achieving athletes with distinction results as set by the Sports Council, and distinguished candidates in the International Olympiads (e.g. Mathematics, Computer Sciences, Biology, etc.) who have been awarded with the first, second and third medals, may be admitted at the University of Cyprus based only on their Lyceum Leaving Certificate, without having to take the entrance examinations. For any further information, please contact the Academic Affairs and Student Welfare Service's website at www.ucy.ac.cy/fmweb/en.

## UNDERGRADUATE STUDIES REGULATIONS

Copies of rules and regulations on matters of studies and student life, and copies of the laws and regulations ratified by Parliament are available at the Information Office of the Academic Affairs and Student Welfare Service, the Student Union office and at the Academic Affairs and Student Welfare Service's website at www.ucy.ac.cy/fmweb/en.

## STUDENT SERVICES

All students are assigned an academic advisor who assists them in academic matters. The Academic Affairs and Student Welfare Service is responsible for registration, documentation, accommodation, financial aid and social support (www.ucy.ac.cy/graduateschool/en).

## Information Office

The Information Office provides information on all student matters including studies, housing, welfare, counselling, career, sports, etc. The information is provided personally, by phone and by e-mail (fm@ucy.ac.cy).

## International Student and Staff Support Office

The Office (www.ucy.ac.cy/internationalsupport) provides (a) information to the foreign students about studies at the University of Cyprus and (b) support to all nonEuropean students and staff seeking to immigration requirements and visa issues such as entry visa, issuing and renewal of residence permits in Cyprus, medical examinations, etc.

## Career Centre (CC)

The CC is the link between students and graduates with the labour market and the postgraduate studies.
The CC aims at enhancing the professional skills and competences of students and graduates. Seminars and workshops are organized each week to build necessary skills for employment, such as "Time Management", "Presentation Techniques", "Problem Solving", etc. At the same time, seminars are organized to help students enter the labour market, such as "Preparation of Curriculum Vitae and Cover Letter", "Preparation of Personal Statement", "Interview Techniques", "Linkedln", etc.
The connection with the labour market is mainly achieved through the organization of presentations for employment prospects in a variety of business disciplines, a Business Game competition and a Career Fair, with more than 70 potential employers involved.
The CC also provides guidance for post-graduate programmes offered abroad, information on scholarships, as well as useful links and websites with useful references that help students make an informative decision.

## Employment Opportunities

The University has a limited number of vacancies available for students' employment. The Career Centre informs students about temporary job vacancies both within and outside the University. Graduate assistantships are sometimes available, depending on individual department needs.
Full-time and part-time vacancies addressed exclusively to students and graduates of our University are announced through the Careers System. Uploading their Curriculum Vitae onto the system, students and graduates can get informed about available vacancies. Also, the Career Centre informs students of a limited number of positions in the various departments of the University in the form of part-time, hourly work while during the summer period. An internship programme for short placements of students in Cypriot enterprises is implemented.

## Psychological Support, Counselling and Personal Development

The University of Cyprus provides free of charge psychological support and counselling services for all its students through the Mental Health Centre. The primary aim of this service is to contribute to the well-being of students, so as to enable them to enhance their experience during the course of their studies and after. Individual or group psychotherapy and counselling sessions are offered to the students. Common concerns among students visiting the Centre include anxiety, stress, relationships, mood swings, problems to do with their academic life (difficulties in adjusting to their new way of life, etc.), a loss of a beloved one, as well as personal or career decisions that need to be taken.

The Centre also organizes presentations and workshops on issues relating to students' psychological well-being. It launches prevention and sensitization campaigns on topics related to psychological health and well-being in collaboration with student and youth groups, as well as with stakeholders and organizations in the broader community. Such activities can also be planned upon request by student groups or departments. It also periodically publishes and disseminates relevant informative material in printed form or on its website.

## Financial Aid

The Social Support Office of the Academic Affairs and Student Welfare Service provides guidance on financial problems. Students with serious financial problems may be subsidized by the Student Welfare Fund. The Fund is supported financially by the University of Cyprus and from external contributions and donations.

## Services for Students with Disabilities

Students with disabilities are treated as equals to all other students, whilst the Social Support Office of the Academic

Affairs and Student Welfare Service makes every possible effort to offer practical solutions to their specific problems, such as access to the University facilities, or assistance on academic issues.

## Student Accommodation and Catering

The University of Cyprus operates a number of student dormitories (208 bed spaces) on campus. For information on the cost and criteria for campus accommodation/other details, students may contact the Housing Office of the Academic Affairs and Student Welfare Service.
Due to the limited number of bed spaces available, the Housing Office maintains a list of flats and houses for rent. This list is available on a weekly basis, during the academic semesters. The Housing Office provides advice on matters related to campus accommodation. A number of informative leaflets are also produced by the Housing Office.

## Accommodation for ERASMUS Students

ERASMUS students attending classes at the University of Cyprus may be accommodated in single rooms in the campus dormitories. ERASMUS students should inform the Housing Office of their accommodation needs by June 15 for the Fall Semester and by November 15 for the Spring Semester.

## Health

## General Health Scheme (GHS)

The General Health Scheme offers to Cypriot students Medical Care as long as they are registered in the Beneficiary Portal and have chosen a Personal Doctor. You can find related information at the following link: https://www.gesy.org.cy/sites/Sites?d=Desktop\&lo $c$ cale= el_GR\&lookuphost=/el-gr/\&lookuppage=home
All EU Students, who are holders of the European Health Insurance Card (EHIC), are allowed access to free medical care at all Public Hospitals.
Non-EU students are obliged by the Migration Department regulations to obtain private health insurance coverage. The International Student and Staff Support Office may provide guidance and assistance regarding medical insurance companies and their costs.
For further information on the subject, please contact the Medical Centre (tel.: +357 22895270/80).

## Solidarity Fund Healthcare "Neophytos Chandriotis"

The Solidarity Fund Healthcare «Neophytos Chandriotis» has been in operation from September 2016. Related information can be found on the University's website at http://ucyweb.ucy.ac.cy/tamioallilegiis/kanones-telidorees/kanones

## STUDENT LIFE

## Student Union

The Student Union of the University of Cyprus was founded in 1993. Its highest body is the General Assembly and its executive body is the Administrative Council, which has 21 members elected annually by its members. Every student becomes a member of the Student Union upon registration. The Student Union is represented in all Governing Bodies (Council, Senate, Departmental and Faculty Boards).
It has a record of rich and varied activity, guided by the struggle for reunification of Cyprus and its people, peace and democracy, student problems and socio-cultural needs. Activities are directed to both its members and society at large.

## Sports

Sports has very rightly been called the greatest social phenomenon of the 20th century. It is in this spirit that the Sports Centre hopes to make its contribution to Cypriot society at every opportunity available. In order to encourage the University community (students and personnel) to participate in sports activities, a wide variety of activities is offered and the opening hours of the sports facilities have been extended as follows:

- Daily, from 07:30 to 22:00 and on Saturdays from 08:30 to 14:30.
The sports programme is divided into the following categories:


## Recreational Sports

This group of activities is for people who want to improve their overall level of physical fitness. The aim of the University is to make sports an inseparable part of university life.

## Internal Championships

Internal championships are open to the entire University community (undergraduate and postgraduate students, academic and administrative personnel). Emphasis is placed on participation as much as winning. They offer a way to improve overall physical fitness, they develop skills and techniques in a variety of sports, and they are fun.
International regulations apply to all matches/ competitions. The University appends its own, stricter regulations related to discipline, since the Sports Centre respects and enforces Olympic principles.
All games are moderated by referees from official sports associations in Cyprus. The Sports Centre is fully responsible for the organization and supervision of all matches/ competitions.

## Competitive Sports

This programme is designed for those who take sports more seriously and for those who wish to compete as members of the University teams. Experienced coaches
oversee the training of these teams. University teams participate in the following competitions:

- Cyprus Association of University Sports Championships
- International Tournaments in Cyprus and abroad
- Pan-Hellenic Championships (EATE)
- European Championships (EUSA)
- World Championships (FISU)


## Student Sports Clubs

The University of Cyprus offers the following basic student sports clubs:

- Squash
- Futsal
- Table Tennis
- Skiing
- Scuba Diving


## Elective Sports Courses

- Volleyball
- Football
- Tennis
- Basketball
- Judo
- Lifelong Fitness
- Squash
- Handball
- Badminton
- Aerobics
- Taekwondo


## Student Clubs

There are 25 student clubs at the University of Cyprus, involved in educational, cultural, artistic and entertainment activities. Students wishing to form a club must draft a statute, which must then be approved by the University authorities. The "Club Evening" is a yearly event organized by the clubs' coordination committee at which students have the opportunity to learn about the activities of the various clubs from their representatives and can register in the clubs of their preference.
The Student Life Office of the Academic Affairs and Student Welfare Service offers support in the formation and functioning of the clubs. There are also periodic workshops related to administrative and communication matters which aim to develop leadership abilities and improve communication and administrative skills.

## List of Clubs

- Archaeological Club
- Art
- Cyprus Association for Special Education
- Dance
- Environmental
- International Students Club
- Film
- IEEE
- Journalists
- Orthodox and Hellenic Tradition
- Photoclub
- Psychology
- Sailing
- "Terpsichorian" Music Group
- Theatre
- Fencing
- Sociology
- Chess Club
- Volunteer
- Greek Language and Foreign Civilizations
- Philosophy
- Handball
- Law


## STUDENT MOBILITY

## Erasmus+ Programme (2021-2027)

Erasmus+ is the European programme for the support of education, training, youth and sport in Europe. Its budget of 26,2 million Euro for the period 2021-2027 will give the opportunity to more than 10 million Europeans to study, train, cooperate, teach and have an experience abroad. Erasmus+ gives opportunities to a wide range of individuals and organizations.
The institutions, which are holders of the Erasmus Charter for Higher Education (ECHE) for the period 2021-2027, may apply for participation in Mobility in the Higher Education Sector, giving the opportunity to students, young graduates and staff to realize exchange periods abroad in the framework of Key Action 1, between Programme and Partner countries.

Participating countries in the mobility activities are all programme and partner countries.
The following mobility activities can be achieved within the framework of this type of mobility projects:

- Student Mobility for studies.
- Student and young graduates' mobility for traineeships.
- Academic staff mobility for teaching.
- Mobility of staff for training.
- Blended Intensive Programmes.

The above mobility activities can be achieved between programme countries or from a programme country to a partner country (partner countries are divided in regions).
For more information about the Erasmus+ programme you may contact the Mobility Office of the International Relations Service (erasmus@ucy.ac.cy, tel: +357 22894281).

## Other Student Exchanges

Within the framework of bilateral agreements of cooperation, signed between the University of Cyprus and other institutions, students have the opportunity to study abroad at collaborating universities.
For more information on student exchange programmes, please contact the Mobility Support Office of the International Relations Service (erasmus@ucy.ac.cy).

## UNIVERSITY OF CYPRUS RADIO STATION

UCY Voice, the Radio Station of the University of Cyprus, was established in order to promote the work of the Institution, to provide information to the members of the university community and to give voice to the students. It broadcasts at $95,2 \mathrm{fm}$ from the website at www.ucyvoice. ucy.ac.cy/en and from mobile app.
All members of the university community - students, professors, alumni and administrative staff - can become radio producers at UCY Voice. UCY Voice organizes seminars and workshops for the training and education of radio producers on topics such as media ethics, human rights, cultural creativity etc.
UCY Voice broadcasts on a 24 -hour basis and its programmes cover the spectrum of information and entertainment. The University's aim is the development of students' creativity, the cultivation of free speech and thought and the establishment of UCY Voice as a means of free expression.

## SCHOOL OF MODERN GREEK

The School of Modern Greek (SMG) was established in 1998 . The main academic objective of the School is to teach Modern Greek as a second/foreign language, and the Greek culture. The courses are targeted to adults, nonnative speakers of Greek from within or outside the academic community.
Since 2014 the SMG offers the six language levels according to the Common European Framework for the Languages, $\mathrm{A} 1, \mathrm{~A} 2, \mathrm{~B} 1, \mathrm{~B} 2, \mathrm{C} 1, \mathrm{C} 2$ in intensive ( 12 hours X 13 weeks), non-intensive ( 6 hours $X 26$ weeks) and intensive summer ( 25 hours X 6 weeks) courses. The SMG offers Greek Language courses tailored to specific needs (Greek and Cypriot expatriates, professional groups, etc.).
Upon successful completion of every programme, students are awarded a certificate. The C1 and C2 levels are recognized by the Cyprus Government as Advanced and Proficiency respectively. UCY students are credited with 9 or 12 ECTS, depending on the programme. All students enrolled in the SMG are entitled to use the Library, the computer laboratories and the sports facilities of the University of Cyprus.
The SMG is located at 75 Kallipoleos Avenue, 1678 Nicosia.

## PETRONDAS INSTITUTE OF MODERN GREEK STUDIES

Since 2012 the Modern Greek Studies Research Centre Petrondas Institute, at the University of Cyprus has been actively engaged in the promotion of Modern Greek scholarship. The Centre's main goal is the organization and implementation of research projects connected to the study of the Greek culture and the promotion of its research findings through events, talks, conferences, open lectures, film screenings and theatrical performances. Through its collaborations with other research centres, it has established itself as an academic space for the creative synergy between academics, students, researchers and writers. The Modern Greek Studies Research Centre is housed in an apartment donated by Christos and Eugenia Petrondas and is located at 30 Nikodimou Mylona Street (3rd floor).


## FACULTIES AND DEPARTMENTS

## The University consists of eight faculties:

- The Faculty of Economics and Management with three departments, the Economics Research Centre and the Centre for Banking and Financial Research.
- The Faculty of Engineering with four departments, the Nanotechnology Research Centre, the International Water Research Institute "NIREAS", KIOS Research and Innovation Centre of Excellence, the Research Centre for Sustainable Energy - FOSS and EMPHASIS Research Centre.
- The Graduate School
- The Faculty of Humanities with three departments and the Language Centre.
- The Faculty of Letters
with three departments, the School of Modern Greek, the Archaeological Research Unit and the Centre for Medieval Arts and Rituals (CeMAR).
- The Medical School with the Centre of Excellence Biobanking and Biomedical Research, biobank.cy.
- The Faculty of Pure and Applied Sciences
with five departments, the Molecular Medicine Research Centre and the Oceanography Centre.
- The Faculty of Social Sciences and Education with four departments and the Centre for Applied Neuroscience.


## Undergraduate Programmes of Study

| FACULTY/DEPARTMENT | PROGRAMME OF STUDY | DEGREE TITLE |
| :---: | :---: | :---: |
| FACULTY OF HUMANITIES |  |  |
| ENGLISH STUDIES | ENGLISH LANGUAGE AND LITERATURE | ENGLISH LANGUAGE AND LITERATURE |
| FRENCH AND EUROPEAN STUDIES | FRENCH AND EUROPEAN STUDIES | FRENCH LANGUAGE AND LITERATURE |
|  |  | MODERN LANGUAGES AND EUROPEAN STUDIES - ENGLISH/GERMAN |
|  |  | MODERN LANGUAGES AND EUROPEAN STUDIES - FRENCH/GERMAN |
|  |  | MODERN LANGUAGES AND EUROPEAN STUDIES - GERMAN/FRENCH |
| TURKISH AND MIDDLE EASTERN STUDIES | TURKISH STUDIES | TURKISH STUDIES - HISTORY AND POLITICS |
|  |  | TURKISH STUDIES - LINGUISTICS AND LITERATURE |
| FACULTY OF PURE AND APPLIED SCIENCES |  |  |
| BIOLOGICAL SCIENCES | BIOLOGICAL SCIENCES | BIOLOGICAL SCIENCES |
| MATHEMATICS AND STATISTICS | MATHEMATICS AND STATISTICS | MATHEMATICS AND STATISTICS APPLIED MATHEMATICS |
|  |  | MATHEMATICS AND STATISTICS PURE MATHEMATICS |
|  |  | MATHEMATICS AND STATISTICS PROBABILITIES/STATISTICS |
| COMPUTER SCIENCE | COMPUTER SCIENCE | COMPUTER SCIENCE |
| PHYSICS | PHYSICS | PHYSICS |
| CHEMISTRY | CHEMISTRY | CHEMISTRY |
| MEDICAL SCHOOL |  |  |
| MEDICAL SCHOOL | DOCTOR OF MEDICINE | DOCTOR OF MEDICINE |
| FACULTY OF SOCIAL SCIENCES AND EDUCATION |  |  |
| EDUCATION | EDUCATION - PRE-PRIMARY SCHOOL TEACHING | PRE-PRIMARY SCHOOL TEACHING |
|  | EDUCATION - PRIMARY SCHOOL TEACHING | PRIMARY SCHOOL TEACHING |
| SOCIAL AND POLITICAL SCIENCES | SOCIOLOGY <br> POLITICAL SCIENCES <br> JOURNALISM | SOCIOLOGY <br> POLITICAL SCIENCES JOURNALISM |
| LAW | LAW | LAW |
| PSYCHOLOGY | PSYCHOLOGY | PSYCHOLOGY |


| FACULTY/DEPARTMENT | PROGRAMME OF STUDY | DEGREE TITLE |
| :---: | :---: | :---: |
| FACULTY OF ECONOMICS AND MANAGEMENT |  |  |
| BUSINESS AND PUBLIC ADMINISTRATION | BUSINESS AND PUBLIC ADMINISTRATION | BUSINESS ADMINISTRATION MANAGEMENT |
|  |  | BUSINESS ADMINISTRATION OPERATIONS MANAGEMENT |
|  |  | BUSINESS ADMINISTRATION - MARKETING |
| ACCOUNTING AND FINANCE | ACCOUNTING AND FINANCE | BUSINESS ADMINISTRATION - ACCOUNTING BUSINESS ADMINISTRATION - FINANCE |
| ECONOMICS | ECONOMICS | ECONOMICS |
|  |  | ECONOMICS - INTERNATIONAL, EUROPEAN AND ECONOMIC STUDIES |
|  |  | ECONOMICS - ECONOMIC THEORY AND ECONOMETRICS |
| FACULTY OF ENGINEERING |  |  |
| ARCHITECTURE | ARCHITECTURE (Integrated Master) | ARCHITECTURE (Integrated Master) |
| ELECTRICAL AND COMPUTER ENGINEERING | ELECTRICAL ENGINEERING | ELECTRICAL ENGINEER |
|  | COMPUTER ENGINEERING | COMPUTER ENGINEER |
| MECHANICAL AND MANUFACTURING ENGINEERING | MECHANICAL AND MANUFACTURING ENGINEERING | MECHANICAL ENGINEER |
| CIVIL AND ENVIRONMENTAL ENGINEERING | CIVIL AND ENVIRONMENTAL ENGINEERING | CIVIL AND ENVIRONMENTAL ENGINEER |
| FACULTY OF LETTERS |  |  |
| BYZANTINE AND MODERN GREEK STUDIES | BYZANTINE AND MODERN GREEK STUDIES | BYZANTINE AND MODERN GREEK LANGUAGE AND LITERATURE |
| HISTORY AND ARCHAEOLOGY | HISTORY AND ARCHAEOLOGY | HISTORY AND ARCHAEOLOGY ARCHAEOLOGY |
|  |  | HISTORY AND ARCHAEOLOGY - HISTORY |
| CLASSICS AND PHILOSOPHY | CLASSICAL STUDIES | CLASSICAL STUDIES |
|  | PHILOSOPHY | PHILOSOPHY |

# economics \& management 




## FACULTY OF ECONOMICS AND MANAGEMENT

Department of Accounting and Finance
Department of Business and Public Administration
Department of Economics

www.ucy.ac.cy/afn/en

## DEPARTMENT OF ACCOUNTING AND FINANCE

- 12 exemptions from the professional title of the ICAEW (Chartered Accountant - ACA qualification).
- 9 exemptions from the professional title of the ACCA (Certified Accountant) with the possibility of completing all 13 modules before graduating.
- Opportunity to intern at a number of auditing firms or companies in the financial and banking sector.
- Department graduates have continued their studies at the graduate level at prestigious academic institutions abroad.
- A very high percentage of graduates are employed even before or within three months after completing their studies.
- Graduates of the Department have been awarded with 31 global awards in the ICAEW exams.
- Graduates of the Department have the highest success rate in the ACCA exams compared to graduates of all the other universities in the world.


## CHAIRPERSON

Irene Karamanou
VICE-CHAIRPERSON
Spyros Martzoukos

## PROFESSORS

Andreas Charitou
Irene Karamanou
Lenos Trigeorgis
Nikos Vafeas
Stavros Zenios
ASSOCIATE PROFESSORS
Spyros Martzoukos
Andreas Milidonis

## LECTURERS

Stylianos Papageorgiou
Adamos Vlittis
SPECIAL TEACHING STAFF
Evita Livera
Maria Proestou

## INTRODUCTION

The current business environment is rapidly changing: markets are becoming increasingly global, organizations are merging, trade is being liberalized and competition is becoming more intense. Information technology has created an innovative environment that facilitates the delivery of a new range of services, the direct exchange of information, and the execution of transactions and agreements. In recent decades, developed countries have shifted their business focus from manufacturing to services, while less developed economies are also changing focus, as they attempt to fill the resulting gap in manufacturing. The recent economic crisis has affected the services sector and, even more severely, the financial services industry. The legal, business and economic environments of all countries have also been affected by this economic crisis.

In these challenging times, only those managers with the ability to anticipate, understand and effectively adapt to the challenges and demands of today's business environment, will be able to lead their organizations to success. Those, who fail to act or fail to respond to these challenges, will expose their organizations to various risks, including their own survival. The ongoing economic crisis of the last decade has revealed the importance of redefining business values and the need to adhere to strict ethical codes in order to regain investor confidence.
Given the challenging environment that businesses and other organizations are currently facing, the Department of Accounting and Finance (AFN) aims at providing students with the skills and knowledge necessary to begin and then advance their careers, leading their organizations to financial success. The Department offers a comprehensive curriculum, one that gives students broad knowledge in the diverse areas of business administration, as well as specialized in-depth knowledge in the disciplines of Accounting and Finance. The curriculum of the Department combines internationally accepted principles of business administration, with knowledge of the local business environment in Cyprus and the wider region, and emphasizes the importance of information technology as a tool for implementing the tactical and strategic objectives of an organization. The curriculum is similar to programmes offered at prominent universities in Europe and North America.

## DEPARTMENT'S OBJECTIVES

The main objective of the Accounting and Finance Department is to take a leading role in the fields of Accounting and Finance, both in Cyprus and the wider region, and to achieve international recognition as a valuable research centre in regard to these areas.

This objective will be achieved through systematic effort in three directions:
(a) Providing integrated academic and scientific knowledge and training of students of the department that will allow them to excel in their professional environment.
(b Supporting high quality research, which is internationally acclaimed.
(c) Disseminating knowledge to the society at large, by organizing educational seminars and other programmes.

## ACADEMIC MISSION

The curriculum of the Department offers a broad education in the various fields of Business Administration and specialized in-depth education in the disciplines of Accounting and Finance. For each of these disciplines, the Department offers separate undergraduate degrees.

The breadth courses of the Department provide students with a comprehensive understanding of business operations. These courses cover a wide range of fundamental knowledge and provide the basis for advanced study in either of the two core disciplines offered in the Department. Students will develop critical and analytical thinking skills and gain knowledge in quantitative and computational methods, both of which are necessary to solve theoretical and practical problems. Such skills are essential in the modern business environment.

The study of Mathematics, Statistics, Computer Science and Economics is an essential preparatory part of the curriculum. Students are also required to select a certain number of elective courses from other faculties, which will allow them to broaden their knowledge. Furthermore, during the last two semesters, students may choose to write a thesis, which will involve either original academic research work, or collaboration with a private or public organization to solve practical problems.

Undergraduate students have access to all computer laboratories of the University, including the Faculty of Economics and Management's specialized computer lab, which is equipped with state-of-the-art equipment and is connected to a fast communication network. Computers are equipped with all the software students may require.
In addition, the Department has ensured that the University Library carries all major international scientific and professional journals and books in all fields of Business and Public Administration. The Library subscribes to an extensive collection of international financial and accounting databases (e.g. Datastream, CRSP, Compustat, Global Vantage, IBES, Thomson-

Reuters), which is available to students throughout their studies.

Graduates will have acquired the tools and knowledge they need to secure employment in leading management positions in a variety of organizations in Cyprus or abroad. More specifically, our graduates will be qualified for employment in the following sectors: banking, securities, and insurance sectors, accounting and auditing firms, manufacturing and retailing, tourism, utilities and various public sector services. The University's international recognition, and that of the Department of Accounting and Finance in particular, will be invaluable to students who wish to explore opportunities abroad, whether in internships or more permanent employment.
Most importantly, graduates of the Department of Accounting and Finance may also acquire certain professional qualifications in Finance (Certified Financial Analyst) and/or in Accounting, such as those for Chartered or Certified Accountant, as the Department offers analogous professional courses. The Department's commitment to academic excellence is reflected in the exceptionally high success rate of our graduates in these professional exams. Finally, the Department's graduates can continue their studies at the graduate level, either at the University of Cyprus or recognized academic institutions abroad. Many graduates of the Department have successfully completed postgraduate studies in prominent universities in Europe and North America. The Department also offers graduate programmes (M.Sc., Ph.D.) in Finance, an M.Sc. in Financial Economics in cooperation with the Department of Economics, and a postgraduate degree in Business Administration (MBA), in cooperation with the Department of Business and Public Administration. The MBA Programme is offered both on a part-time and full-time basis, and the language of instruction can be either English or Greek.

## SOCIAL MISSION

The Department disseminates knowledge to society at large, by organizing a series of lectures featuring topics of local or international interest, and presented by University faculty members, distinguished guests and personalities from the business world. The Department also encourages and supports activities initiated and organized by their students. The Department actively supports the Investment Society, which is funded by the Cyprus Chamber of Commerce and Industry (CCCI).

Our students are eligible to participate in the Erasmus+ programme, which is funded by the European Union. Students in their second, third and fourth year (only in the penultimate semester) are eligible to participate in these programmes, which permit them to study abroad for up to a year in European universities. Relevant courses successfully completed abroad can be used to satisfy the Department's degree requirements, subject to Departmental

Council's approval. Also, Erasmus participants may receive financial support to help cover part of the expenses incurred abroad. The selection of students for participation in the programmes is on a competitive basis. Currently, the Department maintains educational exchange agreements with universities in Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Greece, Italy, Latvia, Luxembourg, Netherlands, Spain, Poland, Portugal and the UK.
Negotiations are underway for similar agreements with other European universities.

## UNDERGRADUATE PROGRAMMES

The undergraduate programme of the Department integrates broad knowledge of the business enterprise, with in-depth knowledge in the area of concentration. Undergraduate degrees are currently offered in the following specializations:

- Accounting
- Finance

All students in the Department generally follow the same curriculum for the first two years. These are introductory courses in various disciplines and key courses in Business Fundamentals, designed to provide a general education and the necessary background for further in-depth study in one of the above areas of specialization. The primary objective of the programme is to develop students' critical thinking and analytical skills and gain knowledge in quantitative and computational methods and techniques, which are essential in solving problems and in the modern business environment.

By the end of the fourth semester, students will have developed a broad understanding of business educationsuch that they can make an informed choice of an area of specialization that suits their interests and career objectives. In the last two years, students are required to take advanced courses in the selected specialty (Business Depth). At the same time, students will consolidate and extend their knowledge, by selecting courses from other disciplines in the Faculty of Economics and Management (Business Breadth). They are also required to choose their electives from other Faculties of the University, further broadening their education. In their final year of study, students have the option of pursuing an independent research study under the supervision of professors in the Department.
To earn a Bachelor degree, students must complete 240 ECTS. The requirements are summarized below:

- English Language (10 ECTS)

Two courses.

- General Education (38 ECTS)

Six courses (Economics, Mathematics, Statistics and Computer Science).

## - Free Electives (20 ECTS)

Three to five courses outside the major area of study, from at least three faculties of the University. Introductory courses offered by the departments of Economics, Mathematics and Statistics, and Computer Science can be taken only following approval.

## - Business Fundamentals (63 ECTS)

Ten courses in various business disciplines (from the Department of Accounting and Finance Accounting and Finance Department and the Department of Business and Public Administration).

- Business Breadth (42 ECTS)

Seven courses, outside the student's area of concentration, from the Faculty of Economics and Management.

- Business Depth in Accounting or in Finance (54 ECTS)

Nine courses in one of the two areas of concentration offered by the Department.

## - Capstone Courses (14 ECTS)

Two mandatory courses in business strategy and business ethics.

- Optional Senior Thesis (12 ECTS)

Instead of taking two higher level courses from the Department (one breadth and one depth) students may opt to undertake a substantial piece of independent research work during their last two semesters of studies. This option is available only for students with a GPA of at least 7.

## Mandatory Courses

## Foreign Language

LAN 100 General Advanced English 5
LAN 101 Academic English 5
Total 10

## General Education

ECO 111 Principles of Microeconomics 7
ECO 121 Principles of Macroeconomics 7
CSC 032 Programming Methods for Problem Solving 6
MAS 001 Mathematics I 6
MAS 002 Mathematics II 6
MAS 061 Statistical Analysis I 6
Total 38

## Business Fundamentals

AFN 221 Personal Finance 6
AFN 111 Financial Accounting I 7
AFN 211 Managerial Accounting and Costing I
AFN 222 Corporate Financial Management ..... 7
BPA 131 Principles and Practices of Management ..... 6
BPA 231 Organizational Behavior ..... 6
BPA 241 Introduction to Operations Management ..... 6
BPA 242 Data Analysis and Business Applications ..... 6
BPA 244 Business Information Technology ..... 6
BPA 251 Principles of Marketing ..... 6
Total ..... 63
Capstone Courses
BPA 435 Strategic Management ..... 7
AFN 416 Business Ethics and Corporate Governance ..... 7
Total ..... 14

The department can offer up to five courses, mandatory or elective, in English without having to simultaneously offer these courses in Greek.

## ACCOUNTING

The academic programme follows the standards of leading universities in Europe and North America. The primary aim of the programme is to equip students with the skills, knowledge and expertise in accounting, auditing, tax, finance and commercial law for rational decision making in the constantly changing international economic and business environment. The Accounting and Finance Department has close links with international professional bodies, such as the Institute of Chartered Accountants in England and Wales (ICAEW), and the Association of Chartered Certified Accountants (ACCA). This cooperation provides graduates with up to twelve (12) exemptions from the professional title of the ICAEW and nine (9) from the professional title of the ACCA. From September 2020, students who are selected to enroll in a specific programme will have the opportunity to obtain the ACCA qualification while studying at the University of Cyprus. In order to achieve this, students will need to pass four (4) external ACCA exams during the summer months. Graduates of the Department have repeatedly excelled in these examinations. In the ICAEW examinations our graduates have won more than 30 global awards in the last five years (for example, first Worldwide Award Professional Stage overall and other first Professional Stage global awards in auditing and tax courses as well as Advanced Stage global awards). It is also worth mentioning that recent analysis carried out by the ACCA has shown that our graduates exhibit the highest passing rate among graduates of all other Universities.
The degree in Accounting provides excellent training for a successful career in Audit firms, in the fields of accounting, auditing and taxation, as well as in banks, semi-government, public and other private organizations. Moreover, Audit firms
provide our students with opportunities to apply and extend their knowledge through internship programmes.
Specifically, in the spring semester of 2018, the Department of Accounting and Finance launched a five-month internship programme with the country's largest audit firms, which takes place in the Spring semester of the students' third year of studies. During the internship period, students are employed on a full-time basis as accounting trainees, enabling students to combine their academic knowledge with practical application, gaining valuable experience that will enhance their academic knowledge and broaden their career prospects. Students also have the option of either a shorter internship programme during the summer holidays (summer internship) or to extend their internship by one more semester typically in the spring semester of their fourth year. Graduates of the accounting programme also acquire the relevant qualifications and skills to continue their studies in Master's or Ph.D. programmes. A number of our graduates choose to continue their studies at leading universities in the United Kingdom and North America.

Students, who choose to pursue a degree in Accounting, will broaden their knowledge in accounting and related areas in the last two years of their studies. The following tables depict all upper-level course requirements during their third and fourth year of studies, along with each course's prerequisites as shown in brackets.

## A. Depth Requirements in Accounting

(i) Nine courses are required in this area, six of which are obligatory. These are:

## AFN 311 Financial Accounting II (AFN 111)

AFN 312 Managerial Accounting and Costing II (AFN 211)
AFN 318 Auditing I (AFN 111)
AFN 319 Taxation I (AFN 111)
AFN 411 Financial Statement Analysis (AFN 111)
AFN 418 Financial Accounting III (AFN 311)
(ii) The remaining three courses may be chosen from the accounting Depth Electives offered at the time of selection. Courses from the Finance Specialism are also acceptable, upon the academic advisor's approval. The Department offers the following accounting electives:
AFN 410 Financial Reporting in the Banking Sector (AFN 111)
AFN 417 Auditing II (AFN 318)
AFN 419 Taxation II (AFN 111)
AFN 414 Energy Sector Accounting and Finance (AFN 111, AFN 222)

## B. Breadth Requirements in Accounting

Seven courses are required to be taken, two of which are obligatory:

AFN 314 Commercial Law
BPA 346 Quantitative Methods in Management II
In addition, at least two of the breadth courses should be in Finance. The courses AFN 410 and AFN 414 can count as Finance courses.
Optional Thesis: Students with a GPA of 7 or higher may elect to undertake a Thesis in lieu of a Breadth Course and a Depth Course from the requirements shown above.

Internships: Students who elect to intern during an academic semester based on the department's approved internship programmes, will have to register for the course AFN 313 (6 ECTS), during the internship semester. Students who continue their internship for a second semester must register for AFN 413 (6 ECTS). Each of these internship courses replace either a depth or a breadth course. Students who intern during one or two summer semesters must enroll in AFN 113 (3 ECTS) or AFN 213 (3 ECTS), respectively. These students are exempted from 3 or 6 in total ECTS from the breadth courses. The total maximum number of ECTS that can be replaced by internships is 12.

## FINANCE

Specialization in Finance focuses on consolidating the student's knowledge of the theoretical framework and analytical methods required for successful financial decision-making, under conditions of uncertainty prevailing in the complex, competitive and globalized business environment. Students with this specialization will develop the skills to undertake financial activities (in relation to capital markets, investment decisions and risk management) in a wide range of organizations, including banks, insurance companies, brokerage firms, portfolio management agencies, industrial firms, commercial firms and government agencies (such as the Central Bank and the Ministry of Finance). Students will also acquire the knowledge and skills necessary to continue their studies at postgraduate level (Master's, Ph.D.), or earn professional certifications such as the CFA (Chartered Financial Analyst).
Our students who have graduated with a degree in Finance, have been admitted to graduate programmes at very prominent universities, for example, the University of London School of Economics, Manchester, Warwick, University College London and Southampton, as well as doctoral programmes in the United States. Our graduates have also been awarded scholarships from the CFA society to pursue their professional qualifications.

The following tables depict all upper-level course requirements during their third and fourth year of studies, along with each course's prerequisites as shown in brackets.

## Depth Courses

The undergraduate programme in Finance requires successful completion of nine depth/specialization courses (these courses are in addition to AFN 222 Corporate Financial Management, which is required of all students in the Department). The following five (of the nine) depth/ specialization courses are required for all students who choose to specialize in Finance:
AFN 321 Corporate Finance II (AFN 222)
AFN 322 Investment and Portfolio Management (AFN 222)
AFN 325 Options, Futures and Risk Management (AFN 222)
AFN 323 Modern Capital Budgeting (AFN 222)
AFN 421 Financial Policy (AFN 321, AFN 322)
The remaining four courses allow students to customize their degree to suit their particular interests, and/or to expand their knowledge of finance topics and application areas beyond their specialized focus. Students, who specialize in Finance, may choose to take four depth courses from the suggested list below and the Internship (two out of the four depth courses may also be replaced by other relevant courses from the Faculty of Economics and Management or from other University departments upon the academic advisor's approval).

AFN 324 Bank Financial Management (AFN 222)
AFN 411 Financial Statement Analysis (AFN 111)
AFN 422 Public Finance (AFN 222)
AFN 423 International Financial Management (AFN 322)
AFN 424 Financial Modeling (AFN 322, BPA 343)
AFN 425 Contemporary Issues in Finance (AFN 222)
AFN 426 Insurance and Risk Management (AFN 222)

## Breadth Courses

Students majoring in Finance must select seven courses (42 ECTS) from the other fields of the Faculty of Economics and Management (Accounting, Management Science, Marketing, Management, and Economics). BPA 346 Quantitative methods in Management II, is required. In addition, at least two of the breadth courses should be in Accounting with the rest of the courses from upper level courses offered by the Faculty of Economics and Management, except Finance courses. Courses offered by departments not in the Faculty of Economics and Management can fulfil these requirements if approved by the student's academic advisor. Students are encouraged to choose breadth courses from the suggested list below. Students can also replace up to two depth courses in Finance from the list below, provided that the same
course is not taken by the students in order to meet other requirements. Finance students who are interested in obtaining exemptions from professional accounting exams, are encouraged to consult their academic advisor at the beginning of the third year of their studies.

AFN 311 Financial Accounting II
AFN 312 Managerial Accounting and Costing II
AFN 318 Principles of Auditing
AFN 319 Principles of Taxation
AFN 410 Financial Reporting in the Banking Sector
AFN 417 Auditing II
AFN 418 Financial Accounting III
AFN 419 Taxation II
ECO 306 International Finance (if AFN 423 is not taken)
ECO 310 Money, Banking and Financial Markets
ECO 370 Topics in Financial and Monetary Economics
ECO 415 Game Theory
ECO 473 Applied Econometrics
BPA 343 Applied Mathematical Modeling
BPA 447 Quantitative Methods in Management III
The above requirements allow Finance students to claim all exemptions from professional Accounting examinations offered by the Department. Students, who are interested in the exemptions, should consult their academic advisors at the beginning of their third year of study.

## REQUIRMENTS FOR A MINOR IN ACCOUNTING

The Department of Accounting and Finance offers a minor in Accounting for a limited number of students from other departments. This offers students from other disciplines the opportunity to add a business dimension to their degree. The course requirements for this degree are indicated below. Students are required to take ten of the following courses (at least 60 ECTS in total) of which 4 courses are compulsory. Students must take AFN 211, AFN 311 and one of the following ones: AFN 318 or AFN 419.

## ECTS

AFN 111 Financial Accounting I 7
AFN 211 Managerial Accounting and Costing I 7
AFN 222 Corporate Financial Management 7
AFN 311 Financial Accounting II 6
AFN 312 Managerial Accounting and Costing II 6
AFN 313 Industry Placement I 6
AFN 314 Commercial Law 6
AFN 318 Auditing I 6
AFN 319 Taxation I 6
AFN 321 Corporate Finance II 6
AFN 322 Investment and Portfolio Management 6

AFN 410 Financial Reporting in the Banking Sector

## AFN 411 Financial Statement Analysis

AFN 414 Energy Sector Accounting and Finance ..... 6
AFN 416 Business Ethics and Corporate Governance ..... 7
AFN 417 Auditing II ..... 6
AFN 418 Financial Accounting III ..... 6
AFN 419 Taxation II ..... 6

Note: The Department is in the process of designing a new minor programme in Finance.

## COURSE DESCRIPTIONS

## Accounting Courses

## AFN 111 Financial Accounting I (7 ECTS)

The main purpose of this course is to provide students with basic accounting knowledge in the framework of the business environment. The course examines issues related to the preparation, presentation and analysis of financial statements, in order to take the appropriate investment, credit and management decisions. Specifically, the course covers the accounting cycle, the double entry system, the basic accounting equation, the accruals concept and adjustment entries, and the preparation of financial statements based on the adjusted trial balance. Topics also include accounting methods for inventories, debtors, cash, tangible and intangible assets, short and long-term liabilities and capital. Finally, the course covers the preparation of cash flow statements and key financial ratios. The course relies heavily on Accounting Theory and Accounting Principles.

AFN 113 Summer Industry Placement I (3 ECTS)

## Prerequisite: AFN 111

The summer placement in an organization aims at combining academic knowledge with practical application through gaining experience in the professional environment. During the placement, which takes place between 3-8 weeks during the summer season, the students are employed on a full-time basis in companies approved by the Department. Students have the opportunity to apply their knowledge and gain valuable experience on issues directly related to their field of study, which enhances their academic experience and broadens their career prospects. Students also have the opportunity to develop their professional skills, improve time management techniques, and broaden their network of business contacts. At the end of the internship, the employer prepares an assessment report. The academic supervisor also evaluates the student's performance based on the employer and students' reports and assigns a grade of Pass or Fail.

AFN 211 Managerial Accounting and Costing I (7 ECTS)

## Prerequisite: AFN 111

This course teaches students to plan, control and evaluate business activities, as well as take the appropriate decisions. Topics addressed include basic cost classification and cost behavior concepts, new manufacturing environment and activity-based costing (ABC), use of cost data in cost-volume-profit analysis, budgets, standard costs and variance analysis, accounting responsibly and using management accounting in decision making.

## AFN 213 Summer Industry Placement II (3 ECTS)

## Prerequisite: AFN 113

The course Summer Industry Placement II is offered to students who have already enrolled in AFN 113. Students are employed on a full-time basis in companies approved by the Department. At the end of the internship, the employer prepares an assessment report. The academic supervisor also evaluates the students' performance based on the employer and students' reports and assigns a grade of Pass or Fail.

## AFN 311 Financial Accounting II (6 ECTS)

## Prerequisite: AFN 111

The course examines the International Financial Reporting Standards (IFRS) adopted by all groups listed on stock exchanges in the European Union. The course focuses on the context in which the standards are developed, their application and analysis for decision-making purposes. Specific topics discussed include: the conceptual framework, accounting treatment of intangible and tangible assets, impairments and revaluations of assets, assets held for sale and discontinued operations, leases, revenue recognition, inventories, construction contracts, cash flow preparation, basic earnings per share, and accounting treatment of current taxation. Students will also learn about the latest developments in the field of Financial Accounting and implement the Standards through case studies.

## AFN 312 Managerial Accounting and Costing II (6 ECTS)

Prerequisite: AFN 211
The course provides a general overview of the strategic planning process and the need for a management planning and control system to be tailored to the individual organization. Emphasis is placed on changes in the managerial field that influence decision making. Topics include: cost allocation procedures and their usefulness in decision making, measuring performance, analysis of information for short-and long-term decision making, activity-based costing, just-in-time.

## AFN 313 Industry Placement I (6 ECTS)

## Prerequisite: AFN 111

The student internship aims at combining classroom theory with practical application through job-related experience. The internship covers one full semester during
which students work full-time at an approved accounting firm. Students are able to apply their knowledge and gain valuable accounting, audit or tax experience that enhances both their academic experience but also their future employability. During the internship, students are given the opportunity to develop their team working abilities, professional and time management skills and grow their network of professional contacts. A mentor at work is assigned to interns who are responsible in monitoring their progress, and feedback to the students' performance. At the end of the internship, the employer prepares an evaluation report. The academic supervisor also evaluates the student's performance based on the employer and students' reports and assigns a grade of Pass or Fail.

## AFN 314 Commercial Law (6 ECTS)

The course examines the Cyprus legal system, as this has developed in the framework of European legislation, and how it affects the modern business environment. It analyses legal issues commonly encountered while running a business. Topics covered include contracts, offenses (torts), property law, labour law and corporate law (commercial law documents, company incorporation, bankruptcy, limited companies, corporate governance and legislation against money laundering).

## AFN 318 Auditing I (6 ECTS)

## Prerequisite: AFN 111

This introductory course examines the International Standards on Auditing (ISAs). The adoption of ISAs is required for all Cyprus companies and all groups listed on stock exchanges in the European Union. The main purpose of this course is to teach students about the nature of audit work, through reference to the detailed rules governing the profession such as: assessment of audit risk and planning the audit, collection of audit evidence with substantive and analytical procedures, auditor reports, internal control system (evaluation and review). The course emphasizes ethical issues related to the auditing profession.

## AFN 319 Taxation I (6 ECTS)

Prerequisite: AFN 111
This course introduces students to basic tax concepts, using the UK tax system as the main example. The course examines the key differences between financial reporting and taxation, international transactions, value added tax, corporate and personal taxation.

## AFN 410 Financial Reporting in the Banking Sector (6 ECTS)

## Prerequisite: AFN 111

The course examines the function and the role of banks, the financial instruments and markets (securities and other investments) such as derivatives. In addition, the course studies the hedge accounting and analyses the fair value of financial instruments. The course examines the financial statements of banks, the risk management, the prudential regulation and reporting requirements for banks, the audit and assurance of banks as well as the ethical considerations.

## AFN 411 Financial Statement Analysis (6 ECTS)

## Prerequisite: AFN 111

The recent international financial crisis and the Eurozone crisis (e.g. Cyprus, Greece, Ireland, Spain, Portugal, Italy) have led many organizations to financial distress. Within this rapidly changing economic environment, there is a greater need for executives, analysts, bankers, portfolio managers and investors who are properly prepared and able to make the right decisions for value creation. The main objective of this course is to assist the above stakeholders in achieving their strategic goals. Specifically, emphasis is placed on: (i) basic financial analysis, including ratios, trend and common size analysis; (ii) forecasts and firm valuation; (iii) the quality of financial information and analysis of business strategy (PESTEL and SWOT); (iv) practical applications of risk management, credit analysis, bankruptcy forecasts (Logistic regression models, Altman Z -score), the role of credit rating agencies and derivatives, such as CDOs, CDS; (v) practical applications in banking, such as capital adequacy and BASEL III III; (vi) practical applications for analysis of capital markets, corporate governance, mergers \& acquisitions and; (vii) international financial analysis and other current capital market issues.

## AFN 413 Industry Placement II (6 ECTS)

## Prerequisite: AFN 313

The course Industry Placement II is offered to students who have already chosen AFN 313. Students are employed on a full-time basis in auditing firms approved by the Department. At the end of the internship, the employer prepares an assessment report. The academic supervisor also evaluates the student's performance based on the employer and students' reports and assigns a grade of pass or fail.

AFN 414 Energy Sector Accounting and Finance (6 ECTS) Prerequisites: AFN 111 and AFN 222
This course is an introduction to oil and gas accounting, with emphasis on accounting for costs incurred in the acquisition, exploration, development and production of oil and natural gas. It is designed to give students an understanding of the accounting standards and practice, that exist in the energy sector, and the skills to evaluate financial performance in this industry. The students will familiarize themselves with measurement of liquidity, capital structure, operating performance and asset utilization. Topics will also cover valuation issues, computation of appropriate returns benchmarks, required disclosures for oil and gas activities, and analysis of relevant companies' financial statements. At the end of the course, students will be familiar with the basic characteristics and differences between the downstream and the upstream sectors and their activities.

## AFN 416 Business Ethics and Corporate Governance (7 ECTS)

## Prerequisites: AFN 111 and AFN 222

The course provides an overview of ethical conduct within a business, with particular emphasis on information
dissemination and finance. The first part of the course focuses on the scope, importance and need for ethical behavior in decision-making. The second part of the course focuses on corporate governance, the importance of ensuring basic ethical corporate values, the various types and benefits of good corporate governance. The course examines case studies, where ethical dilemmas exist or decisions taken violate corporate values. Particular emphasis is placed on the moral aspect of various decisions and corporate governance of all stakeholders.

## AFN 417 Auditing II (6 ECTS)

## Prerequisite: AFN 318

The main objective of this course is to continue the indepth study of the nature and objectives of auditing, with particular emphasis on their practical implications, through case studies and articles. Specifically, the issues addressed include: developments in auditing at a European level, professional ethical issues, external audit and completion stage, auditors' and other reports, money laundering, internal control system, and the "expectation gap." The course relies extensively on literature from international journals, problem solving and analysis of relevant international corporate case studies.

## AFN 418 Financial Reporting III (6 ECTS)

## Prerequisite: AFN 311

The main objective of this course is to supplement the material learned in AFN 311 and to provide students with an in-depth, comprehensive understanding of financial reporting issues, as they apply to financial statements prepared in accordance with International Financial Reporting Standards (IFRS). Emphasis is placed on preparing consolidated financial statements (whether arising from acquisition/disposal of subsidiaries and associates, or joint arrangements). The course also covers the accounting treatment of financial instruments, deferred taxation and earnings per share (diluted earnings per share).

## AFN 419 Taxation II ( 6 ECTS)

## Prerequisite: AFN 111

The aim of this course is to examine the most important aspects of the Cyprus tax system (which is mainly based on the UK tax system). Specifically, the course focuses on an analysis of income sources, taxable income and the various exemptions available, with the purpose of calculating taxation for individuals and legal entities (companies, partnerships). The course also examines defense contribution, capital gains tax and assessment and collection of taxes.

## AFN 492 Thesis in Accounting I (6 ECTS)

Research in theoretical issues or practical problems related to Accounting.

## AFN 493 Thesis in Accounting II (6 ECTS)

Research in theoretical issues or practical problems related to Accounting.

## Courses in Finance

## AFN 221 Personal Finance (6ECTS)

The course provides students with the knowledge and decision-making skills to manage their money and personal finances. Specifically students will become familiar with the time value of money, compound interest, inflation, risk, diversification, understand the multiplefacets of personal financing such as education, career planning, money management, credit, taxes, insurance, retirement. They will learn how to manage personal finances such as savings plans and payment accounts, consumer credit, loans and scholarships, learn how to make major purchasing decisions such as buying a car or a house based on purchasing strategies, consumer protection, cost of credits. In addition, they will learn about health and disability and life insurance, learn how to insure resources such as automobiles and houses, understand the fundamentals of investing in stocks, bonds, mutual funds, real estate, other alternatives, manage their financial future as it relates to retirement, personal estate and learn about the operations and functions of financial institutions such as Banks, insurance companies, pension firms, investment advisors, and the institution of the Financial Ombudsman.

## AFN 222 Corporate Financial Management (7 ECTS)

The course covers: application of the net present value (NPV) to capital budgeting investments, the risk-return trade off, portfolio management, market efficiency, cost of capital, financial leverage, optimal capital structure, dividend policy, and basic valuation methods of securities.

## AFN 321 Corporate Finance II (6 ECTS)

## Prerequisite: AFN 222

The course provides a deeper insight into financial theory, with particular emphasis on investment valuation, capital budgeting and valuation of various financial securities (e.g. ordinary shares, different types of debt, options and rights).The course also provides a more advanced study of dividend and debt policy, and covers more advanced topics, such as interactions between investment and financing decisions, hedging of financial risk, leasing, mergers and acquisitions, and international finance.

AFN 322 Investment and Portfolio Management (6 ECTS) Prerequisite: AFN 222
The course examines the mechanics of the securities markets and provides a sound understanding of the principles of analysis and investment valuation. Subjects covered include securities valuation methods (e.g. bonds, stocks, options, futures), determination of suitability of securities for their inclusion in investment portfolios, effective ways to best trade. Emphasis is placed on analysing securities (i.e. determining whether an individual security is correctly valued in the market), and portfolio management (i.e. combining securities into a portfolio, portfolio monitoring, and evaluation of its performance).

## AFN 323 Modern Capital Budgeting (6 ECTS)

## Prerequisite: AFN 222

The course combines valuation theory with uncertainty and methods for capital investment decisions. Traditional capital budgeting does not adequately address risk and uncertainty issues (pricing of capital goods, exchange rates, etc.). Modern valuation theories provide the tools for developing methods and models to assess mutually exclusive investment funds, evaluation of investment and research projects. Students will make extensive use of computers and software (spreadsheet work) for practical applications of analytical methods.

## AFN 324 Bank Financial Management (6 ECTS)

## Prerequisite: AFN 222

Bank financial management represents the central activity of commercial banks, while the continually changing environment - intensified competition, deregulation, globalization of markets, new financial instruments requires banks to revise the focus of their financial management. The course presents the financial concepts, strategies and techniques that help banks achieve success in this financial environment. After reviewing today's banking environment - banking structure, problems and conditions - the course concentrates on measuring and managing various types of risk faced by financial institutions, such as interest rate, credit, foreign exchange, and liquidity. The course also discusses measures and evaluation of bank performance, basic financial instruments and techniques, bank asset/liability management, new financial strategies, and integrative bank management decisions.

## AFN 325 Options, Futures and Risk Management (6 ECTS)

## Prerequisite: AFN 222

The course examines the nature, characteristics, and markets for options and futures. It analyzes the factors that determine their value and studies basic valuation techniques and their application to the financial activities of the business and investment decisions. It also studies their specific role in hedging or reducing financial risk (security portfolio).

## AFN 421 Financial Policy (6 ECTS)

## Prerequisites: AFN 321 and AFN 322

The course analyses the financial aspects related to the definition and implementation of a company's financial policy (e.g. examines inter-relationship between profitability and growth, dividend policy, debt policy, competitive/strategic positioning, etc.). It uses case studies to apply concepts and techniques learned in previous business courses to the analysis of real life situations and practical problems. It is a capstone course to be taken by the students after all other concentration courses, providing the opportunity for reviewing, integrating, and operationalizing acquired skills in an applied context.

## AFN 422 Public Finance (6 ECTS)

## Prerequisite: AFN 222

The course examines the financial policies and problems facing government institutions and public agencies, such as resource allocation, transfer pricing, and public debt policy (with reference to education, social services, natural resources and the environment).

## AFN 423 International Financial Management (6 ECTS)

 Prerequisite: AFN 322This course studies financial operations in the context of the international environment, with particular attention to the unique opportunities, constraints and risks involved in global operations. These include fluctuating exchange rates, imperfect or distinctive international money, capital and exchange markets, differing accounting, tax and subsidy regimes, political or country risk, and the evaluation and financing of international investment opportunities. This course is useful for managers in organizations active in international trade (exports or imports), subject to foreign competition, having or contemplating direct investment in sales, service or production affiliates overseas.

## AFN 425 Contemporary Issues in Finance (6 ECTS)

## Prerequisite: AFN 222

The course introduces advanced, current issues in finance. It offers to small groups of students the chance to work on selected finance topics of their interest and to develop their ability to follow relevant literature and to carry out independent work. The contents may change from year to year, depending on the faculty and students' interests.

## AFN 426 Insurance and Risk Management (6 ECTS)

## Prerequisite: AFN 222

The course covers the identification, assessment and management of financial and other insurance risks. The economics of insurance demand and supply provide the rationale for insurance and risk management products. The course concentrates on the assessment of credit risk, default risk, and liquidity risk. There is also a qualitative overview of insurance company activities, as well as the general regulatory framework of the insurance industry in both Europe and the U.S.A.

AFN 495 Thesis in Finance I (6 ECTS)
Research in theoretical issues or practical problems related to Finance.

## AFN 496 Thesis in Finance II (6 ECTS)

Research in theoretical issues or practical problems related to Finance.

## TABLE A: INDICATIVE ACADEMIC PROGRAMME FOR THE FIRST AND SECOND YEAR OF STUDIES

## 1st YEAR <br> 1st Semester

ECO 121 Principles of Macroeconomics
MAS 001 Mathematics I
LAN 100 General Advanced English
BPA 131 Principles and Practices of Management
AFN 221 Personal Finance
2nd Semester
ECO 111 Principles of Microeconomics
MAS 002 Mathematics II
LAN 101 Academic English
AFN 111 Principles of Financial Accounting
CS 032 Programming Methods for Problem Solving
2nd YEAR3rd Semester
7
7
AFN 211 Managerial Accounting and Costing
6
BPA 241 Introduction to Operations Management
BPA 251 Principles of Marketing ..... 6
6 Free Elective Course
4th Semester
7 AFN 222 Corporate Financial Management ..... 7
6 BPA 231 Organizational Behavior ..... 6
BPA 242 Data Analysis and Business Applications ..... 6
7 BPA 244 Business Information Technology ..... 66

## TABLE B: INDICATIVE ACADEMIC PROGRAMME FOR THE THIRD AND FOURTH YEAR FOR STUDENTS SPECIALIZING IN ACCOUNTING

3rd YEAR
5th Semester
AFN 311 Financial Accounting II
AFN 312 Management Accounting and Costing II
AFN 314 Commercial Law^
AFN 318 Auditing I
Elective Courses**
6th Semester
AFN 314 Commercial Law^
AFN 417 Auditing II*
AFN 418 Financial Accounting III* $\wedge$
BPA 346 Quantitative Methods in Management II Elective Courses**
6

## 4th YEAR <br> 7th Semester

6 AFN 410 Financial Reporting in the Banking Sector 6
6 AFN 411 Financial Statement Analysis 6
6 BPA 435 Strategic Management 7
Elective Courses**
8th Semester
6 AFN 416 Business Ethics and Corporate Governance^ 6
6 AFN 419 Taxation II*^ 6
Up to 3 Elective Courses**

## Notes:

* Elective for Business Depth in Accounting. Exemption from ACA and ACCA.
** Other Depth Courses, Breadth Courses, Free Electives or Thesis.
$\wedge$ The courses are offered in both semesters.


## TABLE C: RECOMMENDED PROGRAMME FOR THIRD AND FOURTH YEAR FOR STUDENTS SPECIALIZING IN FINANCE

3rd YEAR<br>5th Semester<br>AFN 321 Corporate Finance II<br>AFN 325 Options, Futures and Risk Management Up to 3 Elective Courses *<br>6th Semester<br>AFN 323 Modern Capital Budgeting<br>AFN 322 Investment and Portfolio Management BPA 346 Quantitative Methods in Management II Up to 2 Elective Courses *

4thYEAR

## 7th Semester

6 BPA 435 Strategic Management
6 Up to 4 Elective Courses *
8th Semester
AFN 421 Financial Policy 6
6 AFN 416 Business Ethics and Corporate Governance 6
6 Up to 3 Elective Courses *

* Other Depth Courses, Breadth Courses, Free Electives or Thesis.

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## DEPARTMENT OF BUSINESS AND PUBLIC ADMINISTRATION

The modern business environment is undergoing a major transformation: markets are becoming global, organizations are merging, and regulatory barriers are falling. Information technology creates a virtual business environment, where services are rendered, transactions take place and deals are concluded more efficiently. Recently, we have witnessed the transformation of industrialised nations from manufacturers of goods to providers of services. Many advanced developing countries are closely following this lead, while other developing countries are gradually filling the gap in the manufacturing processes.
The only constant in today's environment is change itself. The astute managers, who anticipate, comprehend, adapt and even proact in a timely fashion in this dynamic environment, will lead their enterprises to success. Those, who are unable to cope with rapid change, face real threats to the survival of their operations. The adage "lead, follow or get out of the way" becomes particularly relevant for new managers in this new era.
CHAIRPERSONGeorge Hadjinicolas
VICE-CHAIRPERSON
George Kassinis
PROFESSORS
Eleni Stavrou-Costea
Leonidas C. Leonidou
George Hadjinicolas
George Kassinis
Andreas Soteriou
Haridimos Tsoukas
Hercules Vladimirou
ASSOCIATE PROFESSORS
Panos Markopoulos
Alexia Panayiotou
Marios Theodosiou
ASSISTANT PROFESSORS
Angelos Georghiou
Christiana lerodiakonou
Christos Nicolaides
PROFESSOR EMERITUS
Christakis Charalambous

## INTRODUCTION

The Department of Business and Public Administration (BPA) aims at training managers, who will lead their enterprises through these challenging times. It offers an integrated programme of studies that emphasizes both breadth of understanding of the business environment, as well as depth in several functional areas. Based on the latest curricula of prominent European and North American academic institutions, it integrates internationally established management principles with sensitivity to the realities and priorities of the local and regional realities. The use of powerful analytical tools and the latest information technology for the support of the tactical and strategic goals of an enterprise play a central role in this programme of studies.

The Department prepares future executives in business and public administration, by cultivating three key qualities: analytical aptitude, critical thinking and moral standing. More specifically, the programme of study aims at:
A) Familiarizing students with modern methods of information analysis, by introducing them to the most recent problem solving tools and developing their strategic skills.
B) Cultivating their critical thinking, in order to be able to manage human resources in modern organizations in an efficient and effective way.
C) Enhancing the values of co-operation, leadership and accountability as well as all qualities which are essential to effective management.

The Department's aims are to provide local and regional leadership in all areas of business and public administration, and to achieve international recognition as a centre of business research excellence.

This is achieved by a systematic effort focused on:
-The education of tomorrow's business leaders in Cyprus and the region.

- The pursuit of research of international impact.
- The establishment of professional development courses and collaborative projects with local and regional industry.

In addition, the range of study programmes provide the Department's graduates with the opportunity to find employment in all the areas of economic and social activity, both in the private and public sector. The Department's graduates also have the necessary training to advance their career in leadership and management positions in Cyprus and abroad. An important element indicating the level of quality provided by the
Department is the fact that the majority of its graduates
are accepted for postgraduate studies in leading universities of the United Kingdom, other European countries, and North America.

## GENERAL INFORMATION

The Department of Business and Public Administration offers three undergraduate programmes: Management, Operations Management, and Marketing. The degrees emphasize both breadth of education across all functional areas of the business enterprise and substantive depth in one of the above areas.

The following postgraduate degrees are also offered by the Department:

- Master in Business Administration (MBA), a full-time programme (in English language) offered jointly with the Department of Accounting and Finance.
- Master in Business Administration (MBA), a full-time programme (in Greek and English language) offered jointly with the Department of Accounting and Finance.
- Master in Human Resource Management, a full-time and part-time programme (in English language).
- Master in Data Science, a full-time programme offered jointly with the Department of Computer Science and the Department of Mathematics and Statistics (in English language).
- Ph.D. in Business Administration (in Greek and English language).

The University of Cyprus follows the European Credit Transfer and Accumulation System (ECTS). In order to graduate with a B.Sc. degree, students must complete all courses successfully while acquiring a minimum of 240 ECTS. Each student is responsible for arranging his/her programme of study and meeting the specific degree requirements, including courses in a foreign language(s) (10 ECTS) (Table A) and a number of electives from other departments of the University (20 ECTS).

Most courses required in the first four semesters are the same for all students in the Department. They include introductory courses in various disciplines and courses in business fundamentals. These courses are designed to provide a general education and the necessary background for further in-depth study in one of the three areas of concentration, namely Management, Operations Management and Marketing (Table B). The development of basic analytical, quantitative and computing skills is a primary objective of the curriculum in the first four semesters. Courses in Mathematics, Statistics, Informatics, and Economics are integral parts of the curriculum. By the end of the fourth semester, students will have developed a broad understanding of business education and will be
able to make an informed choice of the area of specialization that best suits their interests and career objectives.

The programme of studies in the last four semesters emphasizes both breadth of knowledge across all functional areas of a business, as well as in-depth study in a particular area of concentration. These higher-level courses allow students to deepen their knowledge in their area of choice. Students are also encouraged to broaden their knowledge, by auditing courses in other areas of concentration, or choosing their electives in other departments. Many students, especially those planning to continue their education at the Master's or Ph.D. level, choose the option of writing a Senior Thesis. The Final Thesis Project typically involves sponsorship by local industries, and concerns the application of modern business methodologies to practical problems facing the sponsoring institutions.

Attendance is mandatory for all programmes of study. This applies to all elements of the course, that is, lectures, tutorials, workshops, assignments, exams, etc. Class participation is also required for all courses. Students must familiarize themselves with University policies, and can find all the relevant information on the Academic Affairs and Student Welfare Services webpage: www.ucy.ac.cy/fmweb/en

Graduates of the Department will be able to make immediate and substantial contributions to their place of employment, and will have the necessary skills to take on top managerial and leadership roles. Graduates of the Department will also have the fundamental knowledge to continue onto further education and pursue higher degrees (MBA, M.Sc. or Ph.D.), either at the University of Cyprus or other universities/academic institutions worldwide.

## Elective Courses

Through their electives, students will acquire a broad liberal arts education that will enhance their knowledge and skills acquired in the Department. Elective Courses must be chosen from at least three different faculties of the University of Cyprus, and students may take electives from their own Faculty, as long as the chosen courses are not from their own Department. Courses in the students' main area of concentration are not considered elective courses. The Department encourages students to select courses that will broaden their knowledge and skills, as today's international business environment is characterized by a wide diversity.

## Senior Thesis

During their fourth year of study, students may choose to either write a thesis or continue with coursework (one

Breadth and one Depth course). To qualify for the thesis option, the student must have a GPA equal or higher than 6.5 or must receive approval from the potential thesis supervisor and the Departmental Undergraduate Studies Committee. The subject of the thesis is chosen by the student, in consultation with the thesis supervisor who will be monitoring the student's academic progress.

The first stage of the thesis, which represents 6 of the 12 ECTS, requires the submission of a research proposal describing the topic to be studied, a general bibliography, and the proposed methodology. The research topic must be submitted at the beginning of the first semester of the fourth year.

Once the research topic is approved by the thesis advisor, the student must submit the thesis during the course of the second semester of the fourth year. The thesis must include a detailed written essay with reference to theories, methods of problem solving and the findings of their research. This material represents the remaining 6 ECTS. The Department has the right to ask students to present their thesis to a committee comprised of academic personnel from the Department, external academics and other individuals.

For the thesis, students may choose either a theoretical issue or a more practical and specific problem. Students, who choose the practical project option, may work individually or in groups of no more than three people. For those students who work in groups, the contribution of each member must be clear.

## PROFESSIONAL DEVELOPMENT AND LOCAL INDUSTRY COLLABORATIONS

The Department has an active collaboration with local organizations that includes both an educational and a research component. On the educational front, we organize professional development seminars and short courses aimed at entry, middle, and top-level managers. On the research front, we pursue joint projects focused on problems of immediate concern to large segments of local industry.

## STUDENT EXCHANGE PROGRAMMES

The Department has established bilateral student and faculty exchange agreements with several European universities, in the context of the Erasmus+ Programme and other exchange programmes with an international focus. We have hosted students and faculty from a number of European countries, while many of our students and faculty have had academic exchanges at universities in Europe, the USA and elsewhere. Furthermore, we are continually expanding our network of collaborations with academic institutions in other countries, as we aim at providing rich intercultural and international experiences
within an academic framework, to both our faculty and students. This serves to enhance the research and professional capabilities of our two major stakeholders, the University and the community at large.

## PROGRAMME OF STUDIES

The undergraduate programme of study of the Department integrates broad knowledge of the business and public administration, with in-depth knowledge in an area of concentration (Table C). The B.Sc. degrees specialize in the following areas:

## - Management

- Operations Management
- Marketing

Table D presents the course requirements for the above three areas of concentration.

## MANAGEMENT

The concentration in Management prepares students for managerial and leadership positions in a diverse range of organizations in the private, public and non-profit sectors, where there is a continual need for change, adjustment and development. The major objective of the degree in Management is to help students develop the basic skills, required to deal with the challenges and opportunities presented to them in their managerial work. The degree with a concentration in Management combines internationally accepted principles with the particularities of the Cypriot business sector and those of the wider geographical area. The coursework is competitive and comparable to that of top-ranking universities in Europe and North America.

## OPERATIONS MANAGEMENT

The concentration in Operations Management focuses on giving students the fundamental knowledge and skills that will help them to develop and apply analytical and software tools in their support operational decisions. The growing complexity and internationalization of business activities, the ever more intense competition, and the rapid advances in information technology have created a strong need for developing and maintaining effective decision support systems, based on modern analytical methods. These methods are derived from the following fields: Operational Research, Statistics, Mathematics, Financial, Econometrics and other relevant fields and mainly apply to the use of information management technology. There is a growing demand for managers to combine a good understanding of operational activities and challenges with modern means of decision-making.

The curriculum in Operations Management aims at fostering this combination of knowledge and skills. Graduates with a specialization in Operations Management will be in a position to conduct business operations in various areas, such as industry, logistics and supply, finance and banking, telecommunications and transport, as well as many others.

## MARKETING

The Marketing major has two main objectives: first, to prepare students for a variety of careers in different fields of Marketing, as well as in management positions in private and public organizations and, second, to provide students with the essential skills and knowledge that will enable them to continue their studies at a postgraduate level.
The Marketing major emphasizes the development of knowledge, skills and analytical techniques aimed at identification, prediction and understanding of needs, preferences, and purchasing behaviour of individual consumers, households, and organizations. Also emphasized are the design and implementation of effective strategic marketing plans - plans that enable a company to achieve its marketing and business objectives, by optimizing resources and capabilities and exploiting emerging market opportunities.

The Marketing curriculum enables students to develop their creativity and critical judgment for effectively solving marketing and business problems. Students also learn to work systematically, in order to carry out large-scale market research projects and design strategic marketing plans, advertising plans, electronic marketing plans, international marketing plans, and sales management strategies and programmes. In their research projects, students have the opportunity to cooperate with local firms and examine how marketing theories, concepts and approaches are actually implemented in practice. Through this process, students become familiar with the local business environment and prevailing market conditions across various industries.

## MINOR PROGRAMMES

## Minor in Business Administration

The Department of Business and Public Administration and the Department of Accounting and Finance offer a minor in Business Administration to a limited number of students in other departments (Table E). The programme covers the fundamental principles and concepts of Business Administration and Public Management. Students should take at least 42 ECTS in Compulsory Courses and 18 ECTS in Elective Courses.

## Minor in Entrepreneurship

The Department also, offers a minor in Entrepreneurship to a limited number of students from other departments. It is mostly targeted to students from the Faculty of Pure and Applied Sciences and the Faculty of Engineering. The minor in Entrepreneurship gives students the opportunity to enhance their knowledge relative to technological evolution, business evaluation of technological and other innovations and help them acquire the necessary knowledge that allow them to be effectively engaged in the business field (i.e. the creation of a new business) in various economic sectors. Students must complete at least 60 ECTS ( 10 courses), five (5) of each are compulsory. The courses are presented in Table F.

The requirements for admission to the two minor programmes are indicated in the Regulations and Rules of the University of Cyprus.

## COURSE DESCRIPTIONS

## Management

BPA 131 Principles and Practices of Management (6 ECTS)
The purpose of the course is to provide an understanding of the nature and role of management in an organization, as well as to highlight the pressures imposed on management by its external environment. The course is structured around the key management functions, namely planning, organizing, staffing, leading and controlling. It also provides an overview of the basic business functional areas, namely accounting, marketing, finance, production and personnel.

## BPA 231 Organizational Behaviour (6 ECTS)

The course examines the impact that individuals, groups, and structures have on organizational behaviour. The following topics are covered: individual behaviour, perceptions and individual decision-making, motivation theories, group behaviour and decision-making, leadership, power and conflict, organization structure and design, organizational culture, and organizational change and development.

## BPA 235 Introduction to Critical Thinking for Business Students (5 ECTS)

The aim of the course is to help students develop critical thinking. Critical thinking is a skill that, like all skills, needs to be cultivated. In the course, we will deal with the structure, process and outcomes of critical thinking, focusing especially on organizations and public policy. In particular, we will discuss what makes thinking critical and at the same time focus on the logic of reasoning, the process of conceptual analysis, and practical reasoning. We will discuss issues related to evidence, the logical structure of arguments, values and ethics in argumentation, as well as hermeneutics. We will also discuss the social context within which critical thinking
takes place, focusing especially on power relations and authority, the relationship between emotions and thinking, and the genres-cum-discourses through which critical thinking takes place. Finally, we will discuss ways through which critical thinking may be weakened, as well as ways through which it may be strengthened, especially in the context of organizations. The course will draw on literature from philosophy, psychology, and management and public policy. Throughout the course, examples from public life will be examined.

## BPA 271 Introduction to Sociology for Administrative Scientists (5 ECTS)

The aim of the course is to help business administration students gain a broader perspective of the social environment within which enterprises operate and to develop a sociological outlook: to not just see individuals but also the social concepts of power that determine the context of human action, especially in the economy.

## BPA 332 Business Ethics (6 ECTS)

## Prerequisite: BPA 231

The course provides a general overview of ethical performance in business. Students will learn to examine standards and priorities through the lens of ethics and moral reasoning, in order to achieve a balance between business and economic responsibility on one hand, and social and public responsibility on the other. Topics include moral theories in normative ethics, ways to promote and institutionalize ethical behaviour in organizations, and differences in ethical standards in different countries. The class will discuss many cases and problems illustrating ethical dilemmas.

## BPA 334 Human Resource Management (6 ECTS)

## Prerequisite: BPA 231

The objective of the course is to introduce students to the theory and practice of Human Resource Management (HRM). Issues such as recruitment, selection, performance appraisal, planning, compensation and benefits, training and development, as well as employee relations will be analysed in the course. In addition, students will have the opportunity to analyse a variety of practical situations, wherein the theories underlying the practice of HRM are applied.

## BPA 335 Cross-cultural Management (6 ECTS)

## Prerequisite: BPA 231

The course introduces students to the role of culture in Management. It focuses on the meaning and significance of culture, studies the role of cultural values and their influence on organizational behaviour and explains the significance of cross-cultural similarities and differences in management. The course also emphasizes cross-cultural communication and the role of culture in decisionmaking, leadership and human resource management.

## BPA 336 Business Communication (7 ECTS)

## Prerequisite: BPA 231

The course aims to help students understand and appreciate the importance and complexity entailed in communicating effectively at the workplace. The students should be able to recognize and practise basic oral communication skills, describe and explain the basic communication model and the decisions it involves in order to communicate effectively, explain and apply the basic steps and principles in developing business messages.

## BPA 337 Industrial Relations (6 ECTS)

The course examines the procedures involved in employee relations and focuses on the application of these procedures in the Cypriot economic scene and in comparison with that of the European Union. It covers subjects such as employeeemployer relations, unionization, employer associations, collective bargaining, social responsibility and participation, employment democracy in the international economic scene, and a historical overview of employment relations in Cyprus.

BPA 338 Qualitative Research Methods in Business (6 ECTS)
Prerequisite: BPA 231
The course introduces students to the fundamental elements of a qualitative approach to research. It aims at teaching students the principles, aims and methods of conducting qualitative research, and giving them an understanding of the uses of qualitative versus quantitative data. The main issues covered include qualitative research principles, qualitative research methods (observation and ethnography, interviews, content and narrative analysis, conversation and discourse analysis), qualitative research design (sampling and recruitment), credibility of qualitative research (reliability, validity, generalization), qualitative research ethics and challenges, and writing-up qualitative research results.

## BPA 362 Advanced Topics in Organizational Behaviour (6 ECTS)

## Prerequisite: BPA 231

Individual behaviour and group processes are studied in depth. Topics covered include decision-making, basic individual psychology, group formation, and problems in the development and functioning of teams, as well as ways to prevent typical group problems.

## BPA 369 Principles of Entrepreneurship and Innovation (5 ECTS)

The course is offered to the students of the Department of Computer Science
Entrepreneurship is both a way of thinking and a method for developing economic activity by combining: (1) risktaking, (2) creativity, (3) innovation and (4) good
governance within an already existing organization. This course will utilize the Business model Canvas. Specifically, the course will focus on the following eight sections: 1 . Main Partners, 2. Principal activities, 3. Critical resources, 4. Value proposition, 5. Relationships with customers, 6. Distribution channels, 7. Customer department, 8. Cost structure and Expense flows. Additional topics include, among others, business plans, venture capital firms, angel investors, intellectual property rights, diffusion of innovation and sources of innovation.

BPA 430 Current Issues in Management (6 ECTS)
The field of Management covers a wide range of topics, both theoretical and applied. At the same time, it is linked to key areas of social sciences such as Sociology, Psychology and Economics. This diversity of Management is reflected in the research interests of the department's academic staff and hence in this lesson, which generally aims to bring together students and academics who share these interests. The course aims to expose students to various issues/phenomena of management that affect employees and the subsequent challenges/opportunities they can create for modern organizations. It also aims to raise concerns about the causes and effects of complex/ multifaceted management problems presented in the modern organizational environment and the prospects for alternative methods of coping with them.

## BPA 431 Gender, Work and Organizations (6 ECTS)

## Prerequisite: BPA 231

The course examines the relationship of gender, work, and organizations. It explores the lives of men and women in organizations, the different career "choices" as well as the resulting trajectories in promotion and pay. It discusses the role of education and mass media and uses various means through which to study the production of gender identities in the workplace. In addition, the course examines organizational issues such as leadership, human recourses, negotiations, communication, and culture which are often considered to be "universal" among organizations, but which are clearly not, when the gender lens is applied.

## BPA 432 Innovation Management (6 ECTS)

## Prerequisite: BPA 231

The management of innovation is one of the most important and challenging aspects of modern business. Innovation is the fundamental driver of competitiveness and plays a major part in improving the quality of life. Technological innovation is uncertain and risky, but it can still be managed. Therefore, it is essential that students understand the strategies, tools and techniques for managing innovation. The course aims at giving students an understanding of the main issues in innovation management, an awareness of the key features of success, and an appreciation of the relevant skills needed to manage innovation at both strategic and operational
levels. The topics covered include product and process innovations, radical and incremental innovations, protecting intellectual property, appropriability, diffusion of innovations, sources of innovations, etc.

## BPA 434 Entrepreneurship (6 ECTS)

The course is not offered to the students of the Department of Business and Public Administration
The purpose of the course is to explore the many dimensions of new venture creation and growth. While most classroom examples will be drawn from new venture formation, we will also examine cases related to entrepreneurship, social and non-profit entrepreneurship. The class sessions will focus on conceptualizing, developing, and managing successful new ventures, ideas or products, with the goal of creating a business plan.

## BPA 435 Strategic Management (7 ECTS)

The course is offered to the students who are on the 4th year of their studies
The course addresses issues that are of key importance to a company such as vision, mission, and objectives.
Emphasis is placed on competitive analysis, the nature of competitive advantage, the structures and control of management processes, diversification strategies, culture and leadership.

## BPA 436 Leadership (7 ECTS)

The course introduces students to the important topic of leadership, from the perspective that leadership is dynamic and not static. Major theories of leadership are analysed and the relationships between leader, followers and situations are explored, as is the process of leadership. Emphasis is placed on the role of gender and culture in leadership, the characteristics and values of leaders, charismatic leadership and follower roles.

## BPA 437 Managing the Family Business (6 ECTS)

Family controlled businesses (both private and publiclytraded) are unique forms of ownership that are challenged by family dynamics, emotional attachment to the firm and various other issues resulting from the interaction of family, management and ownership particularly where the family wishes to perpetuate its influence and/or control from generation to generation. This course aims to provide an in-depth understanding of what makes family businesses unique, developing the critical analytical thinking skills that help inside managers/executives understand the family business system. Furthermore, it aims to provide students with insight into ownership, business management, and family dynamics issues that affect the performance of family businesses. Students will learn how family ownership and control affect the family and the business as well as develop an understanding of the complexities that exist in the succession planning process.

BPA 439 Management of Public Organizations (6 ECTS)
The course introduces students to the important concepts and tools for managing public organizations. The course highlights the similarities and differences between business (private) and public organizations and includes material on strategic analysis, performance measurement and management, organizational structure and culture, operations and process management, and organizational learning and change.

## BPA 460 Advanced Topics in Strategy (6 ECTS)

## Prerequisites: BPA435

In order to develop and apply a successful strategy, an organization must be able to face and critically analyse four different issues: a) the organization's boundaries: what must an organization do, what size should it be, and in what business sectors should it enter? b) market and competition analysis: what is the nature of the markets in which the organization is competing and what is the nature of the organization in these markets? c) market position: how should an organization place itself, in order to gain competitive advantage over other organizations, what is the basis of its competitive advantage, and how should it adapt and change in the course time? d) the internal environment of the organization: how should an organization build its internal structure? These questions will be answered by examining economic theory, economic sociology, strategic theory and organizational studies.

## BPA 461 People and Organizations (6 ECTS)

## Prerequisite: BPA 231

The course covers a range of topics, including the concept of the social self, perceiving group and individuals, attribution theory, and behaviour within organizations. Special emphasis is placed on issues of power and authority, obedience and conformity, and how stereotypes and prejudice affect groups and organizations negatively.

## BPA 463 Negotiations and Conflict Management (6 ECTS)

Negotiations are an integral part of our professional and personal lives. Therefore, business executives should have highly developed negotiation skills and good knowledge of the procedures necessary for successful negotiations. By acquiring these skills, students should be able to handle business situations with individuals or teams, as well as with suppliers and customers. The course examines the theory, the procedures and the practical aspects of negotiations, especially in the business environment. It focuses especially on the different types of negotiation, the strategy of negotiations, the correct communication between parties, sources of power in negotiations, ethics and multiparty negotiations. It also covers conflict management during the negotiation process.

BPA 464 Energy - Strategy and Management (6 ECTS)
Energy - where to get it from, how to use it efficiently and responsibly - is arguably one of the most critical economic, environmental and social challenges facing the globe today. The course will introduce students to the basic concepts and methods of analysis used across the social sciences (with primary emphasis on economics and business), and help them to understand the production, distribution and consumption of energy. In other words, we will examine the full life cycle" or "cradle to grave to cradle again" of energy (from the stage of raw materials, or inputs, to generation, conversion, distribution, consumption, recycling, and managing waste and impacts). Such methods, tools and perspectives will help students understand, critique, and ultimately influence the management of technical, economic, and policy choices regarding the options for energy generation and use. We will focus equally on the technical, socio-economic, political, and environmental impacts of energy. The course will include examples of cost-benefit, organizational, and institutional analyses of energy production, transformation, and use. It will also use material balance, energy balance and life cycle assessment tools to examine the environmental impacts of energy technologies. Examples will be drawn from various countries and settings. The second part of the course will provide students with insights on the main trends and characteristics of the energy business. Building on the knowledge gained in the first two parts of the course, we will further discuss the value chains of specific energy companies (using those involved in the Cyprus energy market as examples), and consider the energy market outlook, with a particular emphasis on natural gas and the latter's impact on the development of the energy sector in Cyprus and the Eastern Mediterranean based on the knowledge which was gained by the students in the first two parts of the course.

## BPA 465 Business and Climate Change (6 ECTS)

The attention given to the environment nowadays cannot be overlooked. In the course, we will introduce and critically analyse the challenges and opportunities organizations face due to the environmental impacts of their operations. Managers need to understand the factors that drive business value, when dealing with these challenges. In the course, we will study and evaluate how firms respond to these challenges. We will also explore how firms strategically shape the regulatory and competitive context in which they operate. Students will learn how to a) apply conceptual frameworks to evaluate environmental and social performance (triple bottom line), b) assess how markets respond to environmental and social concerns, and c) help their organizations develop a competitive advantage, in an era of higher environmental and social expectations.

BPA 467 Current Issues in Public Administration (6 ECTS)
Public administrations in modern states are now facing a series of major challenges and need to respond urgently and in a decisive manner. Changes in the economic and social environment, environmental changes, the need to protect the environment and the advancement of technological development are just a few of these issues. In addition to the more general issues that need to be addressed, Cyprus needs to find immediate answers such as the economic crisis, the discovery of hydrocarbons in Cyprus, the prospect of resolving the Cyprus problem, developments in labor relations, the need to modernize and reorganize the public service, etc.

## BPA 468 Entrepreneurship and Innovation (7 ECTS)

The course is offered to students who are in their fourth year of studies

The course provides the theoretical and practical framework for the study and analysis of entrepreneurship and innovation. Topics covered include inter alia, business plans, venture capital, business angels, intellectual property protection, diffusion of innovations and the innovation sources. Entrepreneurship refers to the process of identification, assessment and development of opportunities, regardless of the resources that we have available to us. Today, mainly because of economic and social conditions, entrepreneurship is difficult but imperative.

The aim of the course is to explain the process of innovation and entrepreneurship (inter-dependent concepts) in an understandable and simple way. Additionally, the course provides guidance to students to identify a business opportunity, to set up and grow a business, and to have a successful exit. The lectures are based on academic theory, but the emphasis is focused on the practical application of this theory. The series of lectures is designed to familiarize students with theories and practice about entrepreneurship and the management of new businesses while simultaneously elaborating on the role played by new business ideas in the economy.

Specifically, the course provides the theoretical basis regarding the principles of innovation, entrepreneurship and small business management as well as the practical application of this knowledge in order for students to develop the ability to create and manage business effectively and efficiently. The main practical aim of the course is to develop a business plan.

## BPA 469 Creativity and Design Thinking in Organizations (6 ECTS)

Creativity and innovation are the key drivers of success for many of today's leading companies. Some of the most dramatic gains in shareholder value over the last few years (e.g. Google, Apple) are due to a culture that
generates creativity. Indeed, a culture of creativity and innovation is commonly recognized as the only sustainable competitive advantage. An important element of a creative culture is the use of breakthrough design thinking. Design represents a powerful alternative to the dominant management approaches of the last few decades and is an important perspective for business leaders to embrace. The course will focus on developing new ways of thinking "outside the box".

BPA 498 Undergraduate Thesis in Management I (6 ECTS)
Conducting research on theoretical issues or working on practical problems in the area of Management.

BPA 499 Undergraduate Thesis in Management II (6 ECTS)
Conducting research on theoretical issues or working on practical problems in the area of Management.

## Operations Management

BPA 241 Introduction to Operations Management (6 ECTS)
The course examines the basic principles of the management of production and operations in manufacturing and service firms. Operations, in general, comprise all activities involved in the actual production of goods and the delivery of services. As such, operations management becomes a key function of the organization, which must ensure that goods and services are created and delivered efficiently and effectively, while balancing a number of conflicting demands. In order for the operations management to function effectively and achieve the objectives of business strategy, it must be carefully and effectively coordinated with other functions, such as marketing, finance, human resources, etc. Students are exposed to a variety of topics, including service and process design in manufacturing and services, process analysis, capacity planning, operations strategy and competitiveness, facility location and layout, managing for quality, supply chain management, inventory management systems, and recent trends in production and operations management.

## BPA 242 Data Analysis for Business (6 ECTS)

## Prerequisite: MAS 061

The objective of this course is to provide students with the understanding and the experience of using data for decision-making in a managerial setting. Statistics has become an essential tool of modern management practice and this course will emphasize the application of statistical techniques for business decision-making. The focus will be on data collection/interpretation and on applying the concepts of statistical inference.

The course will have three main modules. In addition, the course will have a group project which will allow the students to apply the concepts of linear regression in data from operations management. All mathematical concepts
learn will be motivated through examples from Operations Management. In parallel to the mathematical concepts, the course will introduce students to statistical software such as Excel and R. Each lecture will be accompanied by practice problems and assignments, helping the students familiarize with the concepts and the software.

## BPA 244 Business Information Technology (6 ECTS)

The course explains how businesses deploy key information technology assets (hardware, software, networks and data) and demonstrates that information technology has maximum impact, when it is aligned with firm strategy. The course stimulates ideas for disruptive applications of technology that support novel applications and business plans, and offers insight into emerging trends in IT, such as Cloud Computing and Big Data. Real world examples and mini case studies are a centerpiece of the course, and they are drawn from the instructor's own professional experience, as well as from high quality material developed by other professionals and academics. Laboratory sections run in sync with the lectures and help the students develop hands-on experience in creating webpages and blogs, using WordPress tools, performing modeling and data analysis in MS-Excel, and creating simple database driven applications in MS-Access.

## BPA 245 Introduction to Service Management (6 ECTS)

The course is not offered to the students of the Department of Business and Public Administration

This introductory course examines the activities and management challenges of service organizations. Topics examined include customer identification, customer contact, strategic role of the information resource, facility location, queuing systems in services, and management of supply and demand. Emphasis is placed on the design and management of the service delivery system. Methodologies for evaluating the system's performance, which have been successfully applied in schools and banks, are also examined.

## BPA 341 Operations Management (7 ECTS)

## Prerequisite: BPA 241

There is increased awareness of the importance of operations, both in manufacturing and services, in achieving a competitive advantage. The course introduces students to the fundamentals of Operations Management. Topics to be covered include productivity and competitiveness, product and service design, process selection, facilities layout, design of work systems, aggregate planning, inventory control, materials requirement planning, Just-In-Time systems, scheduling. Current topics such as quality improvement, functional coordination, and issues in international manufacturing will also be addressed. Case studies will be used to present and discuss these concepts.

## BPA 342 Supply Chain Management (6 ECTS)

## Prerequisite: BPA 241

A crucial issue that must be addressed in Supply Chains is the management of inventory. The level of inventory has financial implications for an organization and affects the service level provided to customers. A series of strategic decisions must be made regarding the inventory levels, the centralization versus decentralization of the inventory, the use of postponement and parts commonality in product design. These strategic decisions must be based on solid mathematical models that provide management with key financial and operational indices.

Holding excess inventory has the advantage that it leads to high service levels, and thus higher customer satisfaction, but it also increases the company's inventory holding cost. Statistics show that the inventory holding cost in companies varies from $10 \%$ to $40 \%$ of the cost of producing/purchasing the item. Thus, significant reductions in inventory holding cost can have an impact on the company's profitability. A large body of research quantifies ordering and safety stock policies, analyses product design, and its effect on inventory policies.

The understanding of the art of modeling business problems from their descriptive form into mathematical equations, the familiarization with methodologies used for solving problems in supply chains, the presentation of practical techniques to manage inventories under uncertain demand using data from real companies, the study of contemporary techniques such as aggregation/ disaggregation of inventory, postponement, and parts commonality and the understanding of the benefits of coordination in a supply chain.

## BPA 343 Applied Optimization Modelling (7 ECTS)

## Prerequisite: BPA 241

The course addresses modeling techniques, optimization methods and their application to practical problems. Emphasis is placed on developing modeling skills. Fundamental principles of mathematical programming are addressed and are applied to case studies wherein students perform analysis for decision support purposes Modeling realistic problems and solving them with available modeling/optimization packages (e.g. GAMS, AMPL) are integral features of the course. Algorithmic concepts are also covered to the extent necessary, in order to properly utilize the capabilities of optimization packages, interpret their results and perform postoptimality analysis. Various types of mathematical programming models are examined: linear programs, nonlinear programs, multi-objective optimization models, integer programming models, programmes with special structures (e.g. network flow problems, block-structured programmes).

## BPA 344 Network Modeling and Dynamic Programming (6 ECTS)

Prerequisite: PBA 241
The course examines issues in network modeling and dynamic programming, with equal emphasis on model formulation and solution techniques. The implementation and solution of large-scale models with computers are integral features of the course.

## BPA 345 Quality Management (6 ECTS)

Prerequisites: MAS 061 and BPA 242
The "quality movement" is in the process of evolving from a statistical-based approach to one that envelops transformation of every aspect on management of organizations, from technological to behavioural. The course addresses the changes in management philosophy, explores the tools used by organizations to improve the quality management and organizational productivity, and covers difficulties associated with organizational change. Topics to be covered include definitions of quality in manufacturing and service operations, quality and product design, quality in process planning, statistical process control, acceptance sampling, Total Quality Management (TQM), and Quality Function Deployment (QFD).

## BPA 346 Quantitative Methods in Management II (6 ECTS)

## Prerequisites: MAS 061 and BPA 242

The course examines applications of linear regression models to Business Administration. Students will learn about simple and multiple regressions, inferences in regression analysis, diagnostics and remedial measures, polynomial regression, model building procedures, nonlinear regression, and regression models with binary dependent variables. The course emphasizes data analysis from all disciplines of Business Administration. Students will also become familiar with statistical software packages, such as SPSS and Minitab.

## BPA 347 Management Information Systems (6 ECTS)

The course will acquaint students with the different types of information systems that organizations use in support of their strategy, and explain how firms can deploy technological resources, in order to achieve resourcebased competitive advantage. The course introduces the students to e-commerce, with special focus on network effects and the management (e.g., pricing and versioning) of digital goods. Students will become familiar with how firms use web 2.0 tools, in order to support their marketing and knowledge-management efforts, and will come to recognize the important ethical issues raised by the prevalence of information systems in modern business environments. By the end of the course, students will be able to assess the strategic position of a firm, based on its use of technology in support of its strategic
resources. Furthermore, students will be practically acquainted with the use of Web2.0 tools and will be required to complete assignments related to social media, wikis, mesh-ups, etc. A number of case studies are used to demonstrate the material in practice. The firms that are closely examined include Zara, Fresh Direct, Capital One, Netflix, Zipcar, Walmart, and Zynga, among others.

## BPA 349 Revenue Management (6 ECTS)

This course is an introduction to the theory, principles and practices of revenue management (RM) and how these can be effectively applied to various industries. Revenue management addresses a simple but yet, challenging question: "How can we charge the right price, to the right customer, for the right product, through the right channel, at the right price?"

The course focuses on the application and evaluation of revenue management strategies and it is intended for individuals with a specific interest in the service industry. However, the RM concepts and tools can also be applied in other industries.

In continuation to the above, the course turns its attention to specific RM strategies and tactics followed by a number of limited capacity services, such as hotels, B\&BS, motels, cruise ships, theaters, banquet halls, restaurants etc. Conditions and specific organizational characteristics that allow the application of RM are also examined and discussed. This is important in order to understand the challenges and pitfalls associated with many RM systems and help design effective RM systems.

## BPA 433 Business and E-Commerce (6 ECTS)

The course addresses important aspects of this topic and deepens on the opportunities and challenges generated for organizations. More specifically, it emphasizes on the development of practical knowledge through case studies of actual uses of e-business, the understanding of the theoretical background needed for the development of strategic plans in the context of e-business and the gaining of hands-on training through targeted projects.

## BPA 444 Social Networks and Business (6 ECTS)

Networks are a fundamental tool for modeling complex social, technological and economic systems. Combined with the availability of data on a large scale, the explanation of such complex systems involves many challenges in both modeling and computing. The course focuses on the analysis and explanation of the topology of real and small-scale networks as well as the dynamic processes that take place in them.

Initially the course will cover mathematical models and algorithms for the development of networks that are able to describe the basic structural properties of real-world systems. We will then explore the way in which we can analyse in practice large-scale network data, how to
quantify various properties of "nodes" and "links" and how to justify these properties through network structure and development models.

In the second part of the course, there is focus on various dynamic processes that evolve into networks. For example, how does information (and misinformation) spread over social networks? How can we design a viral marketing campaign in an online social network? How the fragility of financial markets is spreading? How a viral disease is spreading rapidly on an air transport network? We will also be concerned about how different structural features of a network affect how quickly and how 'deep' a dynamic process is spreading to a network.

Finally, this class will deal with network visualizations using various libraries in $R$ or other software.

This course makes extensive use of simple statistical methods and the use of appropriate software such as R .

## BPA 445 Service Management (6 ECTS)

Service companies constitute the largest and fastestgrowing segment of the economies of most developed and developing countries. The course explores the specific tasks faced by managers in various types of service operations. Particular attention is paid to developing an understanding of the close links among the operations, human resources, and marketing functions in service operations. Topics to be covered include the following: customer contact, manufacturing principles in services, service quality, falsifying services, service recovery, service guarantees, capacity issues in service operations, service driven companies, services in manufacturing (service factory), and marketing of service operations.

## BPA 446 Business Analysis: Predictive Models (6 ECTS)

## Prerequisites: MAS 061 and BPA 242

Rapid technological development now provides the ability to easily collect vast amounts of data from a variety of sources, save and quickly recall them, and apply modern, extensive processing methods. The availability of data, both internal to corporate/organization functions, and from external sources (internet), is increasing exponentially.

The use of modern technology tools to analyse extensive data collections is universally recognized not only as a competitive opportunity but also as an imperative for companies, organizations, government agencies, etc. The course covers exact methods of collecting and processing extensive data for business systems analysis. Various sources of data are collected from different sources, and modern analytical approaches that come under "machine learning" methods. Specifically, students acquire practical skills in performing descriptive, exploratory and graphical analyses, statistical analysis, problem solving, regression,
categorization and grouping for forecasting purposes, using modern computing tools. They also consider the methods of how to diagnose benchmark and select the most appropriate predictive models, depending on the nature of the problem. The course includes laboratory lessons where students are familiar with the programming language $R$ and examine practical applications with real data from various business problems.

## BPA 447 Quantitative Methods in Management III (6 ECTS)

## Prerequisites: MAS 061 and BPA 242

The course examines applications of multivariate analysis and time series in business. The following topics will be examined: discriminant analysis, principal components analysis, factor analysis, and cluster analysis, trend and seasonality in time series, and ARMA models.

## BPA 448 Planning and Managing Projects (6 ECTS)

The course will examine the process of project planning, including project definition, managing the organization and cost of projects, managing time and resources in projects, as well as managing risk in projects. In order to manage successfully the performance of the project in terms of cost, time and quality during its implementation phase, the course also presents techniques for the effective initiation and completion of projects and techniques. The course aims at giving students the necessary tools to create a project manual, in which all essential aspects of the project are presented. Computer software related to project management will also be discussed during the course.

## BPA 449 Current Topics in Management Science (6 ECTS)

## Prerequisite: BPA 343

Depending on the interests of the faculty, the specific content of the course will vary from year to year. This course will address current advanced topics in Management Science. In particular, it is envisioned that projects will be identified with local industry and teams of students will be offered guidance and supervision to work on problems geared to their particular interests. The main course requirements are: readings in the relevant literature, lectures given by the instructor and visiting speakers, and completion of an individual project.

## BPA 490 Undergraduate Thesis in Management Science I (6 ECTS)

Conducting research on theoretical issues or working on practical problems in the area of Management Science.

## BPA 491 Undergraduate Thesis in Management Science II (6 ECTS)

Conducting research on theoretical issues or working on practical problems in the area of Management Science.

## Marketing <br> BPA 251 Principles of Marketing (6 ECTS)

The course introduces the concept of marketing and its role in corporate activity. It analyses the forces of the micro environment and macro environment of an organization and examines how these affect the process of taking marketing decisions. It also examines the marketing information system, the behaviour of consumer and organizational buyers and the process of target marketing. In addition, it provides a broad investigation of the key elements of the marketing mix program, namely products, pricing, distribution channels and promotion.

## BPA 351 Marketing Research (7 ECTS)

## Prerequisite: BPA 251

The role, value and limitations of marketing research in the overall marketing activity are examined. The course investigates the various steps in the research process and alternative types of research design. It also analyses the basic methods for collecting marketing data and the types of forms used for data collection. Sampling and field procedures, the process of analyzing, interpreting and presenting the research findings are also discussed.

## BPA 352 Consumer Behaviour (7 ECTS)

## Prerequisite: BPA 251

The course examines the various theories of consumer behaviour and their application to marketing decisionmaking. It analyses the internal and external influences on consumer behaviour and investigates methods for segmenting the consumer market. The consumer decision process, the purchasing act and its outcome are also examined. Trends in the consumer market and the issue of consumerism are also discussed within the context of the course.

## BPA 353 Sales Management (6 ECTS)

Prerequisite: BPA 251
The sales function of Marketing Management is discussed, with special emphasis on the personal selling process. Planning and budgetary aspects of sales and methods for sales forecasting are discussed. The course also reviews ways of organizing, supervising and monitoring the work of sales people. It analyses the personnel selection and recruitment process, personnel training and education, employee motivation and compensation, and methods for evaluating sales performance.

## BPA 354 Marketing Communications (6 ECTS)

## Prerequisite: BPA 251

The course highlights the role of promotion in marketing and provides an overview of the communication process. It investigates the buyer decision-making process and
examines the role of market segmentation and product positioning in promotion. It also analyses in detail the basic promotional tools, namely advertising, sales promotion, personal selling and public relations.

## BPA 355 Retail Management (6 ECTS)

The course provides development of skills for the strategic approach and strategic orientation towards the management of issues relating to retail sales; learning the key analysis methods for effectively dealing with retail sales issues; exposure to the problems that retail sales must deal with and simultaneous emphasis on seeking for documented and informed solutions to these. Familiarization with an informed and erudite implementation of the theoretical strategic managerial framework in order to find and apply practical solutions, while motives and initiatives will be offered to students for them to survey and study the latest developments in this academic field and improve their familiarity with respect to the management of real case studies.

## BPA 452 International Marketing (6 ECTS)

## Prerequisite: BPA 251

The course investigates marketing activities in an international context. It analyses the major aspects of the international marketing environment, and reviews the international marketing research process. It investigates methods and strategies for foreign market segmentation and selection, and critically analyses the international marketing mix tools, namely, products, pricing, distribution channels, and promotion. The course also examines the international marketing planning process, as well as the organization, implementation and control of international marketing activity.

## BPA 453 Strategic Marketing (6 ECTS)

## Prerequisite: BPA 251

The strategic aspects of marketing are investigated and the basic tools for marketing warfare are reviewed. The role of marketing within the overall corporate strategy is discussed and the various components of the marketing planning process rigorously examined. Moreover, both the internal and external environments of the firm are analysed. The process of setting strategic and tactical objectives is examined and alternative ways for achieving the strategic objectives are explored. The course also analyses methods for implementing marketing strategies and reviews various control mechanisms.

## PBA 456 Digital Marketing (6 ECTS)

## Prerequisite: BPA 251

The course examines how modern digital media and technologies enable companies to enhance the effectiveness and efficiency of their current marketing
functions, but also exploit new opportunities for entering new markets, offer new services, apply new online communications techniques, and compete on a more equal footing with larger businesses. The course provides a comprehensive guide to the concepts, techniques, and best practices that support the overall digital marketing process, emphasizing the development of appropriate knowledge and skills required for the successful development and implementation of digital marketing strategies. The main topics covered in this course include: (1) how digital technologies transform the marketing function, (2) the influence of environmental forces on digital marketing activities, (3) the process for developing a comprehensive digital marketing strategy, (4) the use of digital technologies for managing customer relationships, (5) the creation of digital experiences, (6) the design and implementation of marketing communications strategies using digital media and (7) the methods for evaluating and improving digital channel performance.

## BPA 458 Social Media Marketing (6 ECTS)

The rapid expansion of social media marketing has caused fundamental shifts in the way business firms communicate and interact with their customers. The course examines social media from the perspective of marketing, focusing on the new practices and techniques pursued in developing and implementing a firm's marketing strategy. The course content reflects current developments in marketing with respect to social media and bridges the gap between theory and practice using contemporary examples and real-world case studies. The objective of the course is for students to acquire fundamental knowledge and skills that will enable them to set appropriate objectives, develop and implement effective marketing strategies and programs in social media, and monitor and measure the outcomes of these efforts. Upon completion of the course, students should be able to describe the ecosystem of social media and its impact on traditional marketing strategy, identify the profile and purposes of the most popular social media platforms (e.g. Facebook, Twitter, You Tube, Linkedln, Pinterest), evaluate the appropriateness of each platform for specific businesses, understand the dynamic nature and multiplicity of social media content, design strategies for brand development and growth using appropriate tools, and build corporate reputation and manage crises through social media.

BPA 494 Undergraduate Thesis in Marketing I (6 ECTS)
Conducting research on theoretical issues or working on practical problems in the area of Marketing.

BPA 495 Undergraduate Thesis in Marketing II (6 ECTS)
Conducting research on theoretical issues or working on practical problems in the area of Marketing.

## TABLE A: GENERAL DEGREE REQUIREMENTS

$\begin{array}{lr} & \text { ECTS } \\ \text { Foreign Language (English) } & 10\end{array}$General Education48
Elective Courses ..... 20
Business Fundamentals ..... 82
6 Depth Courses and 5 Breadth Courses from the Faculty of Economics and Management* ..... 68
Senior Thesis PR (or one Depth and one Breadth Course) ..... 12
GRAND TOTAL ..... 240

* For Marketing: Seven (7) Depth and four (4) Breadth Courses (68 ECTS)


## TABLE B: COMPULSORY COURSES

| ECTS |  |  | ECTS |
| :---: | :---: | :---: | :---: |
| Foreign Language |  | Business Fundamentals |  |
| LAN 100 General Advanced English | 5 | AFN 111 Financial Accounting Principles | 7 |
| LAN 101 Academic English | 5 | BPA 131 Principles and Practices of Management | 6 |
| TOTAL | 10 | AFN 211 Managerial and Cost Accounting | 7 |
|  |  | AFN 222 Corporate Financial Management | 7 |
| General Education |  | BPA 231 Organizational Behaviour | 6 |
| ECO 111 Principles of Microeconomics | 7 | BPA 242 Data Analysis for Business | 6 |
| ECO 121 Principles of Macroeconomics | 7 | BPA 235 Introduction to Critical Thinking for |  |
| MAS 001 Mathematics I | 6 | Management Students | 5 |
| MAS 002 Mathematics II | 6 | BPA 241 Introduction to Operations Management | 6 |
| MAS 061 Statistical Analysis I | 6 | BPA 244 Business Information Technology | 6 |
| CS 032 Programming Methods for Problem Solving | 6 | BPA 251 Principles of Marketing | 6 |
| BPA 271 Introduction to Sociology for Administrative Scientists | 5 | BPA 332 Business Ethics | 6 |
| PSY 100 Introduction to Psychology | 5 | BPA 435 Business Policy | 7 |
| PSY 100 Introduction to Psychology | 5 | BPA 468 Entrepreneurship and Innovation | 7 |
| TOTAL | 48 | TOTAL | 82 |

Note: Students who wish to be exempted from certain compulsory courses, or who wish to take a more individual and independent study approach, must discuss such options with their academic advisor to ensure that they fulfill all the degree requirements.

## TABLE C: PROGRAMME OF STUDIES

| ECTS |  |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1st YEAR |  | 3rd YEAR |  |
| Fall Semester |  | Fall Semester |  |
| BPA 131 Principles and Practices of Management | 6 | Three Business Depth Courses | 18 |
| ECO 121 Principles of Macroeconomics | 7 | Two Business Breadth Courses (from FEM) | 12 |
| MAS 001 Mathematics I | 6 | TOTAL | 30 |
| LAN 100 General Advanced English | 5 | Spring Semester |  |
| CS 032 Programming Methods for Problem Solving | 6 | BPA 332 Business Ethics | 6 |
| TOTAL | 30 | Two Business Depth Courses | 13 |
| Spring Semester |  | One Business Breadth Course (from FEM) | 6 |
| AFN 111 Financial Accounting Principles | 7 | One Elective Course | 5 |
| ECO 111 Principles of Microeconomics | 7 | TOTAL | 30 |
| MAS 002 Mathematics II | 6 | 4th YEAR |  |
| LAN 101 Academic English | 5 | Fall Semester |  |
| PSY 100 Introduction to Psychology | 5 | BPA 435 Strategic Management | 7 |
| TOTAL | 30 | Two Business Depth Courses or one Business Depth Course and one Business Breadth Course from FEM | 12 |
| 2nd YEAR |  | One Elective Course | 5 |
| AFN 211 Managerial and Cost Accounting | 7 | Senior Thesis or one Business Depth Course or one Business Breadth Course | 6 |
| BPA 241 Introduction to Operations Management | 6 | TOTAL | 29 |
| BPA 251 Principles of Marketing | 6 |  |  |
| PBA 271 Introduction to Sociology for Administrative |  | Spring Semester |  |
| Scientists | 6 | BPA 468 Entrepreneurship and Innovation | 7 |
| MAS 061 Statistical Analysis I | 6 | One Business Breadth Course (from FEM) or |  |
| TOTAL | 29 | One Business Depth Course | 7 |
|  |  | Two Elective Courses | 10 |
| Spring Semester | 7 | Senior Thesis or one Business Depth Course |  |
| BPA 231 Organizational Behaviour | 6 | TOTAL | 30 |
| BPA 235 Introduction to Critical Thinking for Management Students | 5 | GRAND TOTAL | 240 |
| BPA 244 Business Information Technology | 6 |  |  |
| BPA 242 Data Analysis for Business | 6 |  |  |
| TOTAL | 30 |  |  |

## TABLE D: COMPULSORY COURSES



## TABLE E: REQUIREMENTS FOR A MINOR DEGREE IN BUSINESS ADMINISTRATION

| ECTS |  |  |  | ECTS |
| :---: | :---: | :---: | :---: | :---: |
| Compulsory Courses |  | Elective Courses |  |  |
| AFN 111 Financial Accounting Principles | 7 | from | perations Management |  |
| BPA 131 Principles and Practices of Management | 6 | BPA 341 | Operations Management | 7 |
| BPA 244 Business Information Technology | 7 | BPA 342 | Supply Chain Management | 7 |
| AFN 211 Managerial and Cost Accounting | 7 | BPA 343 | Applied Optimization Modelling | 7 |
| AFN 222 Corporate Financial Management | 7 | BPA 344 | Network Modeling and Dynamic |  |
| BPA 231 Organizational Behaviour | 6 |  | Programming | 6 |
| BPA 235 Introduction to Critical Thinking for |  | BPA 345 | Quality Management | 6 |
| Management Studies | 5 | BPA 347 | Management Information Systems | 6 |
| BPA 241 Introduction to Operations Management | 6 | BPA 349 | Revenue Management | 6 |
| BPA 251 Principles of Marketing | 6 | BPA 433 | Business and eCommerce | 6 |
| BPA 332 Business Ethics | 6 | BPA 444 | Social Networks and Business | 6 |
| BPA 435 Strategic Management | 7 | BPA 445 | Service Management | 6 |
| BPA 464 Energy-Strategy and Management | 6 | BPA 446 | Business Analysis: Predictive models | 6 |
| BPA 465 Business and Climate Change | 6 | BPA 447 | Quantitative Methods in Management III | 6 |
| BPA 467 Current Issues in Public Administration | 6 | BPA 448 | Planning and Managing Projects | 6 |
| BPA 468 Entrepreneurship and Innovation | 7 | BPA 449 | Current Topics in Management Science | 6 |
| Elective Courses from Management |  | Elect | e Courses from Marketing |  |
| BPA 334 Human Resource Management | 6 | BPA 351 | Marketing Research | 6 |
| BPA 335 Cross-cultural Management | 6 | BPA 352 | Consumer Behaviour | 6 |
| BPA 336 Business Communication | 6 | BPA 353 | Sales Management | 6 |
| BPA 337 Industrial Relations | 7 | BPA 354 | Marketing Communications | 6 |
| BPA 338 Qualitative Research Methods in Business | 6 | BPA 354 | Marketing Communications | 6 |
| BPA 362 Advanced Organizational Behaviour | 6 | BPA 355 | Retail Management | 6 |
| BPA 430 Current Issues in Management | 6 | BPA 452 | International Marketing | 6 |
| BPA 431 Gender, Work and Organizations | 6 | BPA 453 | Strategic Marketing | 6 |
| BPA 432 Innovation Management | 6 | BPA 456 | Digital Marketing | 6 |
| BPA 436 Leadership | 6 |  |  | 6 |
| BPA 437 Managing the Family Business | 6 | BPA 458 | Social Media Marketing | 6 |
| BPA 438 International Business | 6 |  |  |  |
| BPA 439 Management of Public Organizations | 6 |  |  |  |
| BPA 460 Advanced Topics In Strategy | 6 |  |  |  |
| BPA 463 Negotiations and Conflict Resolutions | 6 |  |  |  |
| BPA 469 Creativity and Design Thinking in Organization | 6 |  |  |  |

## Admission Requirements:

- Admission requirements are according to the University's regulations.
- Students can register for the minor programme after completing two semesters of their studies.
- Candidates must have an average grade of at least 6.5.
- With the application, the candidates must submit a paragraph explaining their interest in the programme and how that fits to their academic and professional goals.


## TABLE F: MINOR DEGREE IN ENTERPRENEURSHIP

| ECTS |  |  |  | ECTS |
| :---: | :---: | :---: | :---: | :---: |
| Compulsory Courses (32 ECTS) |  | BPA 345 | Quality Management | 6 |
| BPA 131 Principles of Management | 6 | BPA 346 | Quantitative Methods in Management II | 6 |
| BPA 435 Strategic Management | 7 | BPA 347 | Management Information Systems | 6 |
| BPA 444 Social Networks and Business | 6 | BPA 349 | Revenue Management | 6 |
| BPA 468 Entrepreneurship and Innovation or | 7 | BPA 433 | Business and eCommerce | 6 |
| BPA 434-A Entrepreneurship | 6 | BPA 445 | Service Management | 6 |
| BPA 469 Creativity and Design Thinking in Organization | 6 | BPA 448 | Planning and Managing Projects | 6 |
| Elective Courses (28 ECTS) |  | At least one (1) of the following courses: |  |  |
| Elective Courses (28 ECTS) |  | BPA 332 | Business Ethics | 6 |
| At least one (1) of the following courses: |  | BPA 334 | Human Resource Management | 6 |
| BPA 251 Principles of Marketing | 6 | BPA 335 | Cross-Cultural Management | 6 |
| BPA 351 Marketing Research | 7 | BPA 337 | Labor/Industrial Relations | 6 |
| BPA 352 Consumer Behaviour | 7 | BPA 432 | Innovation Management | 6 |
| BPA 353 Sales Management | 6 | BPA 436 | Leadership | 7 |
| BPA 354 Marketing Communication | 6 | BPA 437 | Managing the Family Business | 6 |
| BPA 452 International Marketing | 6 | BPA 463 | Negotiations and Conflict Management <br> Energy-Strategy and Management | 6 |
| BPA 453 Strategic Marketing | 6 | BPA 465 | Business and Climate Change | 6 |
| BPA 456 Digital Marketing | 6 | One (1) of the following courses: |  |  |
| At least one (1) of the following courses: |  | AFN 111 | Financial Accounting | 7 |
| BPA 341 Operations Management | 7 | AFN 222 | Corporate Financial Management | 7 |
| BPA 342 Supply Chain Management | 6 | AFN 321 | Corporate Financial Management II | 6 |
| BPA 343 Applied Optimization Modelling | 7 | AFN 323 | Modern Capital Budgeting | 6 |

## Admission Requirements:

- Admission requirements are according to the University's regulations.
- Students can register for the minor programme after completing two semesters of their studies.
- Candidates must have an average grade of at least 6.5 .
- With the application, the candidates must submit a paragraph explaining their interest in the programme and how that fits to their academic and professional goals.

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## DEPARTMENT OF ECONOMICS

Economics is an important discipline because it studies the behaviour of human beings, both as individuals and as organized society. As individuals, we continuously face economic problems, such as whether and how much to save, what goods and services to purchase, and how to increase and use our income to satisfy the multitude of our economic needs. Societies, too, continuously face economic problems, such as inflation, unemployment and balance-of-payments disequilibrium. A nation's effective solution to these problems determines its standard of living and consequently its ranking in the international community.

CHAIRPERSON
Andros Kourtellos
VICE-CHAIRPERSON
Michael S. Michael
PROFESSORS
Elena Andreou
Sofronis Clerides
Andros Kourtellos
Theofanis Mamuneas
Michael S. Michael
Christoforos Pissarides
Marios Zachariadis
EMERITUS PROFESSOR
Louis Christofides

ASSOCIATE PROFESSORS
Andri Chasampoulli
Costas Hadjiyiannis
Christis Hassapis
Ioannis Kasparis
Panayiota Lyssiotou
Nicos Theodoropoulos
Dimitrios Xefteris
Nicholas Ziros
ASSISTANT PROFESSORS
Marios Michaelides
Louis Philippos
Nikolaos Tsakas

## LECTURERS

Eleni Aristodemou
Andreas Tryphonides

## INTRODUCTION

Understanding the economic behaviour of the individual and the basic principles that govern the functioning of a modern economy, enables the economist to evaluate economic indicators and information correctly and to make rational decisions. With such knowledge, the economics graduates can pursue a career in civil service, banking, education or research and earn an important position in the public or private sector. Our graduates have the necessary prerequisites to pursue graduate studies either at the University of Cyprus or at foreign universities of international reputation, and many have been admitted to prestigious graduate programmes in the UK and the USA, some with very generous scholarships. Upon graduation from doctoral programmes, several of these students have secured academic positions abroad.

## DEPARTMENT'S OBJECTIVES

The aim of the Department of Economics is to promote and disseminate economic knowledge. The professors of the Department are active researchers who contribute to the development of economics by participating in international research projects. Their latest knowledge in economics and modern scientific research methods is shared with their students.

The Department's degree programmes provide students with the resources to successfully apply for admission to postgraduate programmes at top universities abroad. In recent years, our students have been accepted with full scholarships in the doctoral programmes of the University of Rochester, Washington U. St Louis, University of Illinois, and the University of Southern California. Students have also secured positions in master's degree programmes at universities such as the London School of Economics and Imperial College. Three of our professors are also graduates of the Department who did their doctoral studies at very good universities in USA.

The strong background that our students acquire also gives them the opportunity to pursue attractive jobs both in Cyprus and elsewhere in Europe. Many of our students choose to specialize in Accounting, while others choose
different fields such as Banking, Finance, Marketing, Risk Management.

Students who choose accounting can secure exemptions from certain vocational training examinations such as ACCA and ACA by attending specific courses at the University of Cyprus. Those who choose Accounting as a minor degree receive almost the same number of exemptions as the students of the Degree in Accounting.

## UNDEGRADUATE DEGREE PROGRAMMES

The Department of Economics offers an undergraduate programme in Economics. It also offers to students in other programmes the opportunity to obtain a minor in Economics.

## DEGREE IN ECONOMICS (ECO)

The Degree in Economics is a standard economics programme, similar to those offered by many international universities. It provides a solid background in economics that prepares students who wish either to continue their studies in economics or to specialize in disciplines such as Accounting, Finance, Administration, etc.

## Degree Requirements

In order to graduate with a Degree in Economics students must complete at least 240 ECTS. The Economics programme is flexible and allows students to either pursue general studies in economics or to specialize by choosing either a specialization or another minor. Specifically, students have the following options:

## 1. General Curriculum

2. Specialization in Economic Theory and Econometrics (ETE)
3. Specialization in International and European Economic Studies (IEES)

All options above result in a Degree in Economics.
The breakdown of credit units (ECTS) of the programme for each specialization is shown in the table below:

|  | General <br> Curriculum | Specialization <br> ETE | Specialization <br> IEES |
| :--- | :---: | :---: | :---: |
| Compulsory Courses |  |  |  |
| Department of Economics | 89 | 95 | 89 |
| Other departments | 39 | 39 | 39 |
| Restricted Elective Courses | 66 |  |  |
| Department of Economics | $24-26$ | $24-26$ | 42 |
| Department of Economics or other departments | $20-22$ | $20-22$ | 50 |
| Other departments | $\mathbf{2 4 0}$ | $\mathbf{2 4 0}$ | $\mathbf{2 4 0}$ |
| Unrestricted Electives | 155 | 155 | 131 |
| Total |  |  |  |
| Minimum ECTS from ECO |  |  |  |

The first three semesters of study are common to all students. In the fourth semester two groups of microeconomic, macroeconomic and econometric courses are offered: ECO 261/262/263 for students who choose the ETE specialization and ECO 251/252/253 for all other students. Students who choose the IEES will be able to start choosing electives in the fourth semester.

## General Curriculum

At least 15 restricted elective courses ( 90 ECTS) are required:

- At least 11 courses (66 ECTS) must restricted electives from Economics
- The remaining four (4) courses (24 ECTS) can be either from the Economics Department or from the list of restricted elective courses from the AFN/BPA/MAS departments (see below).


## Specialization in Economic Theory and Econometrics (ETE)

At least 14 restricted elective modules (90 ECTS) are required:

- At least 10 Courses ( 60 ECTS) must be restricted
electives from the Department of Economics.
- At least two (2) Courses (12 ECTS) must be a MAS course (from the Department of Mathematics and Statistics, see list below) or an ECO course with code 5XX (ECO 501, ECO 502, ECO 503, ECO 551, ECO 552, ECO 553).
- The remaining two (2) courses (12 ECTS) can be from the Department of Economics or from AFN/BPA/MAS. From AFN and BPA departments any course can be chosen. MAS courses must be chosen from the list below.


## Specialization in International and European Economic Studies (IEES)

At least 16 restricted electives ( 92 ECTS ) are required:

- Seven (7) Courses (42 ECTS) must be ECO restricted electives. At least 4 of them must be chosen from the following list:
- One (1) Course (5 ECTS) from the Department of History and Archaeology from the list below.
- One (1) Course (6 ECTS) from the Department of Social and Political Sciences from the list below.
- One (1) Course (6 ECTS) from the Department of Law from the list below.
- Three (3) Courses (15 ECTS) in one language other than English.
- Three (3) Courses (18 ECTS) from AFN/BPA/HIS/LAW/SPS departments. Any course from AFN and BPA can be chosen. HIS, LAW and SPS courses can only be chosen from the catalogues below.


## MINOR IN ECONOMICS

## Requirements for a minor in Economics

Students in other departments of the University wishing to obtain a minor in Economics are required to submit an application to the Department. The successful applicants will be awarded a minor in Economics upon successful completion of the courses shown in Table E.

## COURSE DESCRIPTIONS

## ECO 101 Introduction to Economics (6 ECTS)

This course aims at introducing students to basic economic concepts. The first part of the course introduces microeconomic concepts such as the circular flow of money, the production possibility frontier, comparative advantage and trade, consumer demand and production function, price and income elasticity, consumer surplus, the functioning of markets, economic policy and welfare and economics of the public sector. The second part of the course covers macroeconomic concepts and includes the measurement of national income and cost of living, various types of unemployment, role of minimum income and trade unions, measurement, causes and effects of inflation and aggregate demand and aggregate supply.

## ECO 111 Principles of Microeconomics (7 ECTS)

The course introduces the basic principles of individual decision making of consumers, firms as well as the government. After a short introduction of the basic concepts needed for understanding and analysing economic problems, it examines the market forces of demand and supply and the calculation of elasticities. It then describes and analyses the impact of various government policies and explains how to evaluate the efficiency of market outcomes. The cost structure of firms and profit maximizing conditions, as well as market structure is then analysed. Finally, it examines externalities and their impact on market outcomes and the gains from trade.

ECO 112 Application of Quantitative Methods in Economics (7 ECTS)

## Prerequisite: MAS 061

Application of Quantitative Methods in Economics is the first course out of a series of courses in econometrics aiming at building the foundations for the empirical analysis of economic phenomena such the inflation, unemployment, economic growth, and inequality.

In this course we study the basic elements of probability theory and statistics, the specification and estimation of the linear regression model, the properties of LS estimators in the linear regression model, inference (hypothesis testing and confidence intervals) in the linear regression model. We also study model selection and misspecification tests to assess the statistical adequacy of the model. Furthermore, we study the topic of heteroskedasticity, nonlinearity, and temporal dependence. Finally, we cover simple time-series models and prediction. One of the central goals of this course is to introduce the students to econometric software package

STATA in the empirical applications of linear regression model using real observable economic data.

## ECO 113 Mathematics for Economists (7 ECTS)

## Prerequisite: MAS 001

The aim of the course is to provide a firm foundation of the mathematical concepts and techniques used in economics. The core topics of the module are the fundamentals of mathematics, univariate and multivariate calculus, unconstrained and constrained optimization. Moreover, economic applications will be discussed for each topic.

## ECO 121 Principles of Macroeconomics (7 ECTS)

This course provides an introduction to the tools and concepts of macroeconomics. It focuses on the performance of national economies and policies instituted by governments and central banks that affect economic performance. The course introduces the issues of economic growth, unemployment and inflation, money creation and determination of the interest rates.

## ECO 211 Microeconomic Theory (7 ECTS)

Prerequisite: ECO 111
Microeconomic theory analyses the behaviour of consumers and firms, studies the ways in which they interact with markets and evaluates the performance of markets with respect to the effective use of available resources. The course studies the way in which consumer preferences, together with the constraints they face, determines demand for different goods, as well as the behaviour of producers within the market framework they have to operate in. The course is concluded with the analysis of competitive markets.

## ECO 221 Macroeconomic Theory (7 ECTS)

## Prerequisite: ECO 121

The course begins with a short description of the main economic variables. Subsequently, the goods and money markets are analysed separately, and then, the closed economy IS-LM model is presented in detail to prepare students for understanding the differences between this and the more empirically relevant case of open macroeconomy models. The IS-LM model is then used for the analysis of fiscal and monetary policies. Next, the supply side of the economy is introduced. We analyse the labour market, the price setting and wage setting behaviour of firms and the medium-run equilibrium. At this point, the goods, money, and labour markets have been examined in great detail. The macroeconomic model that follows examines the simultaneous equilibrium in all markets, both in the short- and in the medium-run. Apart
from the determination of the price level, nominal and real wages, interest rate and national income, this aggregate model is used for the analysis of fiscal and monetary policies, the inflation rate and the unemployment rate. The course then extends the IS-LM model to include the role of expectations, and to emphasize the open economy case. Finally, a basic economic growth model is introduced in order to help understand the main determinants of economic growth.

## ECO 222 Introduction to Econometrics (7 ECTS)

## Prerequisite: ECO 112

The primary objective of the course is to provide a thorough understanding of the linear regression model and its correct estimation. Particular emphasis is given to the interpretation of the regression results. Another aim of the course is the understanding of the various data sources and their proper use. A further objective is to understand the concept of causality and how it can be proved. Finally, students will be able to further develop their skills in using the econometric package Stata.

## ECO 223 Mathematics for Economists II (7 ECTS)

## Prerequisite: ECO 113

This course is a continuation of ECO 113 Mathematics for Economists I and its aim is to present some advanced mathematical topics that are used in static and dynamic economic problems. With the use of theory and exercises, emphasis will be placed on developing the abilities that are necessary for the core economics courses of the programme of studies.

## ECO 251 Topics in Microeconomics (7 ECTS)

Prerequisite: ECO 211
The course provides a deeper understanding of markets by studying monopolistic and oligopolistic markets, focusing on the features that differentiate them compared to perfectly competitive markets. It covers the basic models of oligopoly (Cournot, Bertrand, Stackelberg) as well as the issues of collusion between firms in oligopolistic markets. Subsequently it provides an introduction to game theory and its applications in Economics, where the concept of decision making on problems that contain strategic interactions is studied. Additionally, the course covers problems of decision making in the presence of uncertainty or asymmetric information, as well as the impact of externalities and public goods on markets.

## ECO 252 Topics in Macroeconomics (7 ECTS)

## Prerequisite: ECO 221

The course provides students with a structured approach to selected topics of modern macroeconomic theory. The macroeconomic models that will be presented will
typically be based on the microeconomic principles of rationality and individual optimization. Particular emphasis will be placed on general equilibrium theory within competitive markets and the theory of exogenous as well as endogenous economic growth. The sub-topics to be covered include the study of macroeconomic models that incorporate simple forms of heterogeneity, such us the OLG model, and a discussion of the concept of imperfect information and its importance for the macroeconomy.

## ECO 253 Econometrics Methods (7 ECTS)

## Prerequisite: ECO 222

The Econometrics Methods course presupposes knowledge of the probability theory as covered in ECO 112, and builds upon the knowledge of the classical linear regression model and statistical inference techniques acquired in ECO 222. Topics covered include: generalized least squares method; regression analysis for time series data and panel data; instrumental variable and two-stage least squares estimation; binary dependent variable models and simultaneous equation models. Emphasis is given on the application of theoretical concepts on practical economic issues through the extensive use of computer-based exercises in Stata. A major feature of this course is the development of the applied econometrics skills required for the successful completion of the undergraduate thesis.

## ECO 261 Advanced Microeconomics (7 ECTS)

## Prerequisite: ECO 211

The course begins with the analysis of markets in which there is no perfect competition. Monopoly market are analysed, focusing on the basic problems of price discrimination. Then, it covers the basic models of oligopoly (Cournot, Bertrand, Stackelberg) and provides an introduction to product differentiation. The basic concepts of general equilibrium are also presented, limited to problems of pure exchange. Subsequently, it provides an extensive introduction to game theory, covering static and dynamic games of complete information and repeated games. Finally, it covers problems of asymmetric information, providing a detailed analysis of adverse selection, moral hazard and signalling.

## ECO 262 Advanced in Macroeconomics (7 ECTS)

## Prerequisite: ECO 221

The course provides students with a structured approach to selected topics of modern macroeconomic theory. The macroeconomic models that will be presented and analysed will be based on the microeconomic principles of rationality and individual optimization. Particular emphasis will be placed on general equilibrium theory within competitive markets and the theory of exogenous
as well as endogenous economic growth. The sub-topics to be covered include the study of macroeconomic models that incorporate simple forms of heterogeneity, such us the OLG model, and a discussion of the concept of imperfect information and its importance for the macroeconomy.

## ECO 263 Econometrics Method (7 ECTS)

## Prerequisite: ECO 222

The course provides students with a deeper theoretical understanding of modern econometric techniques, statistical inference and obtain sufficient technical background for following more specialized topics in econometrics such time series econometrics, financial econometrics and micro-econometrics. The course covers the following tropics: The linear model in matrix form. OLS estimation, small sample and large sample inference. GLS estimation and HAC correction. Endogeneity, systems of equations and IV/GIV methods. Introduction to panel models.

## ECO 305 International Trade (6 ECTS)

## Prerequisite: ECO 211

The course examines the various theories and the issues associated with trade policy. It examines absolute and comparative advantage, specific factors, the HeckscherOhlin model and the impact of external economies of scale and imperfect completion on trade. It also analyses the various tools of trade policy, their impact on welfare as well as the political economy of trade. Finally, it examines trade policy in developing countries and trade agreements.

## ECO 306 International Finance (6 ECTS)

## Prerequisite: ECO 221

National income accounting and balance of payments. Foreign exchange market and exchange rate determination in the short run and long run. National income and exchange rate. Fixed exchange rates and foreign exchange intervention. International Monetary systems 1870-present. Macroeconomic policy and coordination under flexible exchange rates. Optimum currency areas and the European case. The global capital market and the developing countries, growth, crisis and reform.

## ECO 308 Economic Development (6 ECTS)

## Prerequisite: ECO 221

This course provides an introduction to the study of the main economic problems faced by developing countries. Among the topics covered we present a broad picture of what characterizes underdeveloped economies, what are the potential causes underlying such underdevelopment, and discuss what policies can be adopted to improve the
living conditions in these countries. We present a wide array of macro and microeconomic models together with relevant empirical evidence.

## ECO 309 Economic Growth (6 ECTS)

## Prerequisite: ECO 221

The course starts with stylized facts in economic growth. Then, it examines the Solow growth model and its empirical applications. Then it focuses on models of endogenous growth including one-sector and two sectors of endogenous growth models such as the AK model, models of learning by doing, the Uzawa-Lucas model, models of technological change, models of Schumpeterian growth, directed technological change, and expanding variety models. Furthermore, it covers a number of topics in diffusion of technology, government sector and public spending, trade and growth, economic development and economic growth including the role of institutions. Finally, we also consider the topic of the origin of sustained economic growth.

## ECO 310 Money, Banking and Financial Markets (6 ECTS)

## Prerequisite: ECO 221

This course studies financial markets (shares, bonds, foreign exchange) and financial institutions (banks, insurance companies, mutual funds). Some of the issues to be addressed include: the role and importance of Financial Markets, Money, Meaning and Functions. Interest Rates and Yields. Determination of Interest Rates. Market Shares and Determinants of Shares Price. Functions Financial Institutions. Banking and NonBanking Financial Institutions.

## ECO 311 Labour Economics (6 ECTS)

## Prerequisite: ECO 211

This course is devoted to the study of key issues of labour economics. Firstly, the course covers the behaviour of workers and employers in the labour market and how their decisions affect labour supply and demand, employment, and wages. The course then examines various key topics, including unemployment, wage differences across workers, human capital and returns to education, labour market discrimination, compensating differentials, labour mobility, wage inequality, unions, and labour market policy. Throughout the course, relevant case studies and empirical evidence from various countries are discussed.

## ECO 312 Industrial Organization (6 ECTS)

## Prerequisite: ECO 211

Industrial organization is the branch of economics that studies imperfectly competitive markets. The course will analyse the basic theoretical models of competition in oligopolistic markets with homogeneous or differentiated
products, under price or quantity competition, and in the presence of price leadership and capacity constraints. The models will provide the toolbox for the analysis of topics such as the relationship between technology and market structure, collusion and cartels, predatory behaviour and entry deterrence, and auctions.

## ECO 313 Public Economics (6 ECTS)

## Prerequisite: ECO 211

This course is an introduction of the microeconomics of the public sector. Initially, it examines the circumstances under which an economy without public sector achieves efficient allocation of resources. Subsequently, it examines the problems that arise due to public goods, externalities and incomplete information and examines the means through which the government can intervene to lead to a more efficient allocation of resources. Finally, it examines the impact the public expenditure and taxation on the supply of factors of production, the efficient allocation of resources and the equitable distribution of income.

## ECO 315 International Taxation and National Policy (6 ECTS)

## Prerequisite: ECO 211

This course presents the stylized facts and concepts and outlines the main issues of international taxation and the implications for the international movements of goods and capital. The first part of the course introduces students to basic taxation concepts and describes the principles of direct and indirect optimal taxation in a closed economy. The second part of the course starts with how the optical tax rules are modified in an open economy and considers how national tax policies affect the allocation of capital in an international context, and considers issues of international tax competition and harmonization, the behaviour of multinational firms and the international allocation of savings, investment and production.

## ECO 316 Economics of the European Union (6 ECTS)

## Prerequisite: ECO 111

This course begins with a historical reflection on the need for a post-World War II union, the efforts to unify Europe as well as its enlargement. It examines the structure, functioning, institutions and competences of the European Union, such as the European Parliament, the Council of the European Parliament and the Court of Auditors. It then uses micro- and macro-economic models to examine issues such as: economic integration, customs unions and the common market, economic development, free movement of labour and capital. Additional topics cover the common agricultural policy, economics of comparative advantage and specialization,
unemployment, economic geography and regional policies.

## ECO 317 Topics in European Economic Integration (6 ECTS)

## Prerequisite: ECO 221

The aim of the course is to assist students to understand the role of the euro, banking union and fiscal union for the economies that comprise the Eurozone. Moreover, to understand the proximate causes of the European Crisis.

The course examines various topics such as: similarities and differences between the Gold Standard and the Euro, Exchange Rate Regimes, Optimum Currency Areas, EMS, EMU, the Euro, Banks, and Banking Union, Fiscal Policy, the Stability Pact and Fiscal Union, Assessing Integration: Price level convergence within the Eurozone. The European (Fiscal) Crisis: (1) relation to the Financial Crisis, (2) relation to structural problems of the economy, (3) the role of overconsumption, budget deficits, trade deficits and longterm Growth.

## ECO 320 History of Economic Growth (6 ECTS)

The course describes the evolution of economic thought from antiquity to today. It focuses on economic ideas rather than general theories of economic systems, and it emphasizes the link between economic thought and other historical and social phenomena. The course is divided into three units. The first unit seeks the origins of economic ideas in the work of the ancients, the scholastics, the mercantilists and the physiocrats. The second unit focuses on the analysis of the market economy by the classical economists, and its critique by Marx and others. The third unit examines various economic currents of the 20th century (institutionalists, Keynesianism, Austrians, monetarism, etc.) and concludes with an overview of the state of economic thought today. The course is open to a general audience and does not require extensive knowledge of economic theory.

## ECO 324 Introduction to Political Economy and Public Policy 6ECTS)

## Prerequisite: ECO 211

This course is designed to provide students with an introduction to the economic approach to politics, also known as positive political theory or rational choice theory. Political economy seeks to understand and explain policy outcomes and political behaviour in an environment where political actors are rational and goal oriented. The course will focus on models of politics that build upon formal reasoning and mathematical expressions. Political outcomes are then explained by the interaction between these actors within the institutional particularities of their environment.

## ECO 327 Environmental Economics (6 ECTS)

## Prerequisite: ECO 211

The course uses economic concepts and analytical tools to examine the relationship between the economy and the environment. The course starts with a general overview on the topic. It then examines the problem of pollution and pollution externalities in a competitive market. Following that, it studies the economic efficiency of environmental regulatory measures, such as pollution standards, taxes, subsidies, and marketable pollution permits. Benefit-cost analysis and non-market valuation techniques are then investigated. Finally, the course offers an overview of some main topics from the existing literature

## ECO 331 Productivity and Technology (6 ECTS)

## Prerequisite: ECO 211

The objective of the course is the presentation of different methods measuring productivity and technological change. It requires knowledge of producer theory and basic econometrics.

## ECO 355 TOPICS IN INTERNATIONAL ECONOMICS (6 ECTS)

Prerequisite: ECO 211
The class examines the International Economy and the environment in which multinational corporations operate. It analyses the purpose and rules of the World Trade Organization, as well as other international organizations. Regional Trade Agreements, like the European Union and NAFTA, are also examined. In addition, the class analyses Foreign Exchange Markets and the different strategies Multinational Corporations use to take advantage of the opportunities they are faced with.

## ECO 362 Structure and Strategy of Firms (6 ECTS)

## Prerequisite: ECO 312

The course seeks to develop students' understanding of firm organization and strategic decision making. The first part of the course will focus on structure. It will review the main theories of the firm, examining questions such as: what is a firm, what are its objectives, what factors determine its scale and scope? Topics in this part include bilateral monopoly, bargaining and principal-agent relationships. The second part of the course will focus on firms' strategic choices in various markets. Examples include mergers and acquisitions, vertical integration, pricing strategies, quality choice, tying and bundling, research and development, and standard setting.

## ECO 363 Regulation Theory and Policy (6 ECTS)

## Prerequisite: ECO 211

The course analyses the motivation, methods and implications of state intervention in the economy. What is
the purpose of state intervention? What tools do governments have at their disposal? What are the consequences - intended or unintended - of government intervention? The course examines the regulation of natural monopolies, methods of granting monopoly rights, and legal restrictions to market entry. The energy and telecommunications markets are examined as case studies. The role of competition policy - which is the broader policy that aims to promote competition in markets - in relation to regulation is also examined.

## ECO 370 Topics in Financial and Monetary Economics (6 ECTS)

Prerequisites: ECO 111 and ECO 221
The aim of the course is to understand the notion of efficient markets and no arbitrage opportunities, understand the alternative ways of financing a corporation, understand the role of shareholders, creditors, and management of a firm. Evaluate investment opportunities using alternative investment criteria, apply stock and bond valuation methods. Understand the riskreturn trade-off in choosing an optimal portfolio of stocks, understand how capital structure changes the value of the firm, predict exchange rate movements based on interest-rate differentials.

## ECO 391 Placement in Organizations I (6 ECTS)

(Prerequisite: Successful completion of the compulsory courses of the second year of the academic studies and at least 120 ECTS of the corresponding academic programme that the student attends. Required: Selection is based on the academic achievement of the student in the previous semesters with minimum grade point average 6/10 and the criteria set by the firm/organization).

The objective of the placement in organizations is to enable students to acquire practical experience and applied knowledge in sectors related to Economics. Also, students are given the opportunity to develop communication and other skills.

## ECO 392 Placement in Organizations II (6 ECTS)

Prerequisite: Successful completion of the compulsory courses of the second year of the academic studies and at least 120 ECTS of the corresponding academic programme that the student attends. Required: Selection is based on the academic achievement of the student in the previous semesters with minimum grade point average 6/10 and the criteria set by the firm/organization.
The objective of the placement in organizations is to enable students to acquire practical experience and applied knowledge in sectors related to Economics. Also, students are giventhe opportunity to develop communication and other skills.

## ECO 397 Research Methods in Applied Economics I (6 ECTS)

## Prerequisites: ECO 112, ECO 211 and ECO 221

The course is an introduction to the fundamental tools necessary for research in economics or for employment as a professional economist. The course covers different aspects of the research toolbox of modern economists such as Mathematics and Statistics, Academic Skills for Economists and Empirical Econometric Skills. The aim of these modules is on the one hand to introduce or review the tools students need in order to master the material presented in the programme and on the other hand to enable progress towards independent research and for employment as a professional economist.

## ECO 398 Topics on the Cyprus Economy (6 ECTS)

## Prerequisites: ECO 211 and ECO 221

The aim of the course is the systematic and in-depth analysis of the Cypriot economy. The course is designed to combine the theory with practice by showing how economic principles can illuminate the workings of the Cypriot economy. Initially the course makes a historical review of the economic developments in Cyprus since 1960. Following that, it covers topics which concern the monetary policy, financial system, fiscal policy and social policy. Particular emphasis is given on current European issues. The course also examines the main problems and challenges that the economy is facing and policies that can be implemented.

## ECO 415 Game Theory (6 ECTS)

## Prerequisite: ECO 251 or ECO 261

The aim of the course is to present and analyze the basic tools of Game Theory. Game Theory deals with decision making of strategically interdependent agents. The course will present and analyze equilibrium concepts in static and dynamic games under complete and incomplete information. Moreover, we will apply these tools in problems of economics, such as oligopolies, negotiations, auctions etc.

## ECO 473 Applied Econometrics (6 ECTS)

## Prerequisite: ECO 253 or ECO 263

The course covers different topics in Applied Econometrics. It is based on various textbooks and other publications that are given to the students in due time. The following topics are covered: (1) Discrete and limited dependent variable models, (2) Time series models, (3) Panel data models. With regards to the empirical part of the course, students must be able to use the STATA statistical package.

## ECO 497 Research Methods in Applied Economics II (6 ECTS)

## Prerequisite: ECO 397

The course is the continuation of the course ECO 397 and provides a deeper analysis of the fundamental tools necessary for research in economics or for employment as a professional economist. The course covers different aspects of the research toolbox of modern economists such as Mathematics and Statistics, Academic Skills for Economists and Empirical Econometric Skills. The aim is on the one hand to introduce or review the tools students need in order to master the material presented in the programme and on the other hand to enable progress towards independent research and for employment as a professional economist.

## ECO 501 Microeconomic Analysis I (7.5 ECTS)

This course covers microeconomic theory at an advanced level. The course provides detailed knowledge of the neoclassical theory of consumer and producer behaviour. It also develops the basic principles of game theory under conditions of both complete and incomplete information and applies these to the analysis of problems such as collusion, bargaining, auctions, moral hazard, and adverse selection.

## ECO 502 Macroeconomic Analysis I (7.5 ECTS)

The course will introduce students to the foundations and methodology of dynamic macroeconomic theory and main classes of macroeconomic models, with a review of useful mathematical tools such as dynamic programming and optimal control as well as relevant empirical methods. The objective of the course is to deepen the understanding of aggregate fluctuations, as well as the role of economic policy.

## ECO 503 Statistics and Econometrics I (7.5 ECTS)

The aim of this course is to provide technical background in statistical distributional theory, inference and asymptotic analysis required for econometrics analysis. These techniques are applied in details for the finite and large sample analysis of the OLS and ML estimators. The technical background provided in this course enables students to follow in depth subsequently more specialized methods in econometrics such as IV, GMM as well as specialized courses in time series econometrics, financial econometrics and panel data.

## ECO 551 Microeconomic Analysis II (7.5 ECTS

## Prerequisite: ECO 501

The course is divided into three parts. The first part of the course studies individual behaviour in the presence of
uncertainty. The second part of the course serves as an introduction to general equilibrium theory and its extensions, and discusses the theorems of welfare economics. The analysis covers both pure exchange economies and economies in which production is available and introduces the notion of the core of an economy. The third part of the course focuses on problems of asymmetric information. A brief introduction is made on the basics of mechanism design, focusing mainly on the comprehension of the nature of principalagent models and the revelation principle. This is followed by detailed analysis of adverse selection (with applications both on price discrimination and insurance markets), signalling (including the standard models of education as signalling mechanism and cheap talk), and moral hazard.

## ECO 552 Macroeconomic Analysis II (7.5 ECTS)

## Prerequisite: ECO 502

This course deals with the micro foundations of macroeconomics and with short run policy. The micro foundations include consumption, investment, labour supply and labour demand. Short run policy is about monetary and fiscal policy rules, what their basis is and what can they achieve. The main technique used in the course is dynamic optimization.

## ECO 553 Statistics and Econometrics II (7.5 ECTS)

## Prerequisite: ECO 503

ECO 553 is a Ph.D. course in Statistics and Econometrics. The course assumes a background in probability theory and statistical inference and some knowledge of linear regression. The course begins with the linear regression model and discusses issues of model selection and misspecification. The students master asymptotic theory (estimation and hypothesis testing) for both LS and MLE. Then the course focuses on bootstrap, GMM, and the problem of endogeneity. Finally, the course provides a brief introduction to time series analysis, limited dependent variable models, and panel models. Special attention will be given on applications using real data. For this purpose, we will use the econometric packages of GAUSS or MATLAB and STATA.

## MAS 001 Mathematics I (6 ECTS)

Introduction: Real numbers - Inequalities - Absolute value - Equation of a straight line, circle and parabola, Functions: Kinds of functions - Graph of a function - Inverse function - inverse trigonometric functions - Exponential and Logarithmic functions, Limit and Continuity:Limit of a function - Continuity of a function - Intermediate-Value Theorem -Limits and Continuity trigonometric, Exponential and Logarithmic functions, The Derivative: The derivative function - techniques of differentiation - Implicit
differentiation- differentiation of inverse function parametric equations, Applications of the Derivative:Increasing and decreasing functions - Relative extrema - Absolute extrema - Graphing of a function Newton's method - Rolle's theorem - Mean value theorem, Integration: The indefinite integral - the definite integral the fundamental theorem of calculus - Average value of a function, Principles of integral evaluation: Integration by parts - integration by substitution - integration of rational functions by partial fractions.

## MAS 061 Statistics Analysis I (6 ECTS

Descriptive Statistics, Probability (basic notions, conditional probability Bayes rule\} Combinatorics, distributions, Central limit theorem, statistics, decision theory (confidence intervals, hypothesis testing, comparison between populations), etc.

## MAS 101 Calculus I (8 ECTS)

Fundamental properties of real numbers. Sup and Inf of a set and its basic properties. Sequences, its limits, properties of converging sequences. Subsequences. Nested interval principle. Functions and their limits. Sequential approach to limits of functions. Continuity of functions. Intermediate value Theorem and Existence of Extreme values Theorem. Uniform Convergence. Derivatives, basic results. Mean value Theorem and its variations. Continuity and derivative of Inverse function. Graph of a function. L'Hôpital's Rule.

## MAS 102 Calculus II (8 ECTS

Required essential knowledge: MAS 101
Partitions, upper and lower sums, Riemann integral on a closed interval. Basic existence theorems of integrals. Computation of volumes and areas. The Fundamental Theorems of Calculus, generalised integrals. Logarithmic and exponential functions. Basic methods of integration, integration by parts, substitution, induction formulas, integration of rational functions. Taylor's formula, computation of Taylor's formula for various basic functions. Approximation of smooth functions by polynomials, the irrationality of e. Series, comparison test, Cauchy's criterion, ratio test, nth root test, integral test, absolutely and conditionally convergentseries, Leibniz's Theorem for alternating series, Abel's and Dirichlet's criteria, products of series.

## MAS 121 Linear Algebra I (8 ECTS)

The algebra of matrices, invertible matrices. Reduced echelon form of a matrix and linear systems of equations. Vector spaces, base, dimension. Linear maps, matrix of a linear map, change of basis matrix, rank of a matrix. Determinants. The set of solutions of a linear system. Eigenvalues, eigenvectors and eigenspaces.

## MAS 131 Basic Mathematics (7 ECTS)

Functions and limits. Differentiation. Applications of differentiation, graphs, optimization problems. Integration (indefinite, definite and improper integrals), techniques of integration. Applications of integration (areas of domains in the plane, volumes of solids, arc lengths of curves and areas of surfaces of revolution). Differential equations. Complex numbers.

## MAS 261 Introduction to Probability (7 ECTS)

Counting methods, combinatorics, probability measure space though $\sigma$-algebras, independence of events, random variables, cumulative distribution function, discrete and continuous random variables, mean value, multivariable distributions, multivariable normal distribution, sums of random variables, distributions of functions of random variables, covariance function, independence of random variables through the cumulative distribution function, moment generating function, characteristic function, introduction to the law of large numbers, introduction to the central limit theorem.

## MAS 262 Introduction to Statistics (7 ECTS)

Random samples, statistical experiments, statistics, estimation methods (e.g. method of moments, method of maximum likelihood), properties of estimators (e.g. unbiasedness, sufficiency, completeness), exponential families, Rao-Blackwell theorem, Lehmann-Scheffe theorem, Cramer-Rao variance lower bound, confidence intervals, minimum length confidence intervals, hypotheses testing, properties of tests

## CS 003 Computer Science and Information Systems (6 ECTS)

Basic understanding of computer science concepts. Introduce the students to the 'modern' research trends of the computer science field and the various applications of Computer Science. Students will also become aware of internet safety and malicious software and how they can protect themselves from these dangers. Students will get familiar with various tools and software considered vital for their academic and professional career. The course will cover the following topics: Internet safety and malicious software, social networking, introduction to Web 2.0, search engines, introduction to cloud computing, databases, web design, advanced excel (excel statistics and economical formulas), data visualization, social networking.

## CS 031 Introduction to Programming (7 ECTS)

Computers and Binary Systems. Hardware and Software. Programme Development Cycle, Algorithms and Flow Diagrams. Alphabet and Syntax of FORTRAN. Operators. Selection Structures and Loops. Arrays. Functions and

Subroutines. Recursion. Formatted Input-output. Files. Dynamic data.

## CS 032 Introduction to Computer Science \& Information Systems (6 ECTS)

Introduction to the Principles of Programming, with emphasis on structured programming, abstraction, and the design, implementation, checking and debugging of modular programmes. Mastering the material through laboratory exercises in the C Programming Language.

## LAN 100 General Advanced English (5 ECTS)

This course introduces students to the English language skills required at university. It is designed to help students develop competency in speaking, reading, writing and listening in an academic setting and to understand the importance of sociolinguistic aspects of the language.
Whilst developing and improving all language areas, the course also promotes 21 st century skills such as critical thinking, creativity, problem solving and digital and information literacy-key skills.

Elements of this course are aligned with the B 2 level of the Common European Framework of Reference for Languages (CEFR).

LAN 101 Academic English (5 ECTS)
Prerequisite: LAN 100 or equivalent
This course helps students to further develop their proficiency in written and spoken academic communication in English.
It is designed to help students improve the quality of their academic presentations in English in both content and delivery. All core skills incorporated in the course will assist students to perfrom effectively in their academic lives and prepare them for the workplace.
This course is aligned with the B2+ level of the Common European Framework of Reference for Languages (CEFR).

## LAN 209 Advanced English for Global Communication (5 ECTS)

## Prerequisite: LAN 101 or equivalent

This course is for students of Economics and other disciplines who aim at mastering their skills and competencies in English and enriching their vocabulary and terminology at an advanced level. The course encourages active participation and cooperative learning by engaging students in studying authentic material on economic, international and multicultural topics. Taskbased language learning promotes written and oral production in the target language. Upon completion of this course students are expected to communicate and interact with fluency and clarity in the target language in academic, social and professional contexts.

Elements of this course are aligned with the B2+/ C1 level of the Common European Framework of Reference for Languages (CEFR).

## HIS 181 Introduction to Modern European History (1789-1918) (5 ECTS)

This is an introductory, "broad brush" survey of the history (mainly political) of Europe from the French Revolution to the end of the First World War. Themes that are developed in the course include: The French Revolution - Napoleonic Europe - The Congress of Vienna - The Revolutions of 1830 and 1848 - Napoleon III - The Eastern Question - The unifications of Italy and Germany - The scramble for Empire - The origins of the First World War - The outbreak and the course of First World War - The Russian Revolution - The end of the First World War.

HIS 285 Europe 1918-1945: From the Treaty of Versailles to the fall of Nazi German (5 ECTS)
The Treaty of Versailles - victors and vanquished - the new Europe. Revolutionary movements 1919-21. The 1920s: in search of a new balance. Cooperation and collective security. The League of Nations. The Great Economic Crisis and its consequences. Fascism and Nazism in Europe. Authoritarian models and their spread in the rest of Europe. Towards war: power politics and alliances. Dress rehearsal: The Spanish civil war. European Culture in the inter-war years. The Second World War.

## SPS 152 Comparative Politics (6 ECTS)

The course introduces students to Comparative Politics, as one of the major areas of Political Science. It discusses and trains students in the comparative method of analysis and addresses basic concepts, such as state, nation-state, political systems, political culture, political socialization, social critique, political parties, interest groups and political development in a comparative setting. It examines case studies of European and other countries.

## SPS 153 International Relations (6 ECTS)

Introductory course on the contemporary international political system with emphasis on the structures, factors and processes, which form the world political scene and affect relations among states. Emphasis is placed on the role played by states, international organizations and other entities and factors in shaping the dynamics, issues and outcomes of international politics. Some of the basic concepts and issues examined include the state, international organizations, power, balance of power, national interest, diplomacy, international law, foreign policy, war and regional integration.

## SPS 156 European Integration (6 ECTS)

An introductory course on European integration, which looks at the basic concepts, trends and processes of political
and economic integration. Issues of integration are examined from a historical and theoretical perspective, focusing on the foundation and evolution of the European Communities. It also examines the potential, prospects and problems of the process of deepening and widening the EU.

## SPS 266 The Political System of the European Union

 (6 ECTS)The objective of the course is to familiarize students with the basic structures and functions of the EU. It places emphasis on the institutions of the EU, especially their composition, functioning and mission. It provides a historical overview of the evolution of the EU and its institutions, but the course has a contemporary focus on recent and current issues.

## SPS 361 Cyprus and the EU (6 ECTS)

The course explores basic issues and aspects of the relations of Cyprus, with the European Union beginning with the signing of the Association Agreement in 1972. There is emphasis on the period dating to the submission of the application for membership in 1990. There is also discussion of the political aspects of EU membership and related issues in the context of Cyprus's European orientation. The structures, functioning, deepening and widening of the EU are some of the issues examined from the viewpoint of Cyprus as a member state.

## SPS 362 Policies of the European Union (6 ECTS)

The course seeks to provide students with the necessary knowledge background that will allow them to become familiar with and understand the main policies of the European Union (EU).

The course examines the process of producing and implementing public policies in the context of the European construction. Specifically, the course examines: the EU's broader economic policy as well as its efforts to tackle the economic crisis, its redistributive policies (regional, social, rural etc.) and the limits set by the European budget, the attempt to create a common foreign policy, the energy policy which is particularly important for Cyprus, given the discoveries of hydrocarbons in Eastern Europe, and finally the Internal Affairs policy that covers the hot issue of migration.

The analysis of EU policies will be undertaken with the support of analytical tools from European integration theories, public policy production theories and economic regulation theories.

## LAW 201 European Union Law I (6 ECTS)

The module introduces the organizational structure of the EU and focuses on its legal system. Specifically, the emphasis is placed on the constitutional principles, that the

Court of Justice has formulated, and on the peripheral and interconnected legal premises, that complement the procedural law of the Union. Finally, the approach is one that examines simultaneously the legal response of the national legal orders, on the basis of the analytical hypothesis stating that the evolution of EU law is the product of judicial dialogue.

## LAW 202 European Union Law II (6 ECTS)

The module concentrates on the substantive law of the EU and on the four fundamental freedoms, with the emphasis being placed on the free movement of goods. In addition, the procedural law of the Union is fully explored and explained, as well as the different aspects of the jurisdiction of the Court of Justice.

## LAW 205 Public International Law I (6 ECTS)

The course concentrates on the function, the basic concepts and fundamental principles of the international legal system, the means of international law-making and enforcement. It gives an overview of the traditional and contemporary theoretical approaches to International Law, its sources (treaties, custom, etc.), and focuses on the state (elements of statehood, recognition) as the main subject of International Law. The course also examines the fundamental principles of International Law, particularly the peaceful settlement of disputes as well as the prohibition on the use of force and its exceptions.

## LAW 206 Public International Law II (6 ECTS)

The course focuses on certain areas of international law that are of particular relevance to Cyprus. The course examines the law of the sea, focusing on the maritime zones of the Republic of Cyprus and the dispute in Eastern Mediterranean. Furthermore, the course examines the jurisdictional immunities of states and other actors, as well as the rules of state responsibility. Finally, the course examines the various aspects and phases of the Cyprus problem in the UN Security Council and the main judgments of the European Court of Human Rights on the property rights of the displaced persons.

## TABLE A: LIST OF COMPULSORY COURSES FOR THE DEGREE IN ECONOMICS

## Compulsory Courses for all students

| Course Cod | de and Title | Semester | ECTS |
| :---: | :---: | :---: | :---: |
| ECO 111 | Principles of Microeconomics | 1 | 7 |
| MAS 001 | Mathematics I | 1 | 6 |
| MAS 061 | Statistical Analysis | 1 | 6 |
| CS 003 | Computer Science and Information Systems | 1 | 6 |
| LAN 100 | General Advanced English | 1 | 5 |
| ECO 121 | Principles of Macroeconomics | 2 | 7 |
| ECO 112 | Applications of Quantitative Methods in Economics (MAS 061) | 2 | 7 |
| ECO 113 | Mathematics for Economists I (MAS 001) | 2 | 7 |
| CS 032 | Introduction to Computer Science \& Information Systems | 2 | 6 |
| LAN 101 | Academic English | 2 | 5 |
| ECO 211 | Microeconomic Theory (ECO 111) | 3 | 7 |
| ECO 221 | Macroeconomics Theory (ECO 121) | 3 | 7 |
| ECO 222 | Introduction to Econometrics (ECO 112) | 3 | 7 |
| ECO 223 | Mathematics for Economists II (ECO 113) | 3 | 7 |
| LAN 209 | Advance English for Global Communications | 4 | 5 |
| ECO 397 | Research Methods in Economics I (ECO 112, ECO 211, ECO 221) | 7 | 6 |
| ECO 497 | Research Methods in Economics II (ECO 397) | 8 | 6 |
| Additional Compulsory courses for General and IEES specialization |  |  |  |
| ECO 251 | Topics in Microeconomics (ECO 211) | 4 | 7 |
| ECO 252 | Topics in Macroeconomics (ECO 221) | 4 | 7 |
| ECO 253 | Econometric Methods (ECO 222) | 4 | 7 |
| Additional Compulsory courses for ETE specialization |  |  |  |
| ECO 261 | Advanced Microeconomics (ECO 211) | 4 | 7 |
| ECO 262 | Advanced Macroeconomics (ECO 221) | 4 | 7 |
| ECO 263 | Advanced Econometrics (ECO 222) | 4 | 7 |
| ECO 415 | Game Theory (ECO 261) | 5-8 | 6 |

Note: Courses in brackets are prerequisites.

## TABLE B: LIST OF RESTRICTED ELECTIVE COURSES FOR THE DEGREE IN ECONOMICS

## Specialization in International, European and Economic Studies (IEES) <br> At least 16 restricted electives ( 92 ECTS) are required:

- Seven (7) Courses (42 ECTS) must be ECO restricted electives. At least 4 of them must be chosen from the following list:
Course Code and Title ..... ETCS

ECO 305 International Trade (ECO 211)
ECO 306 International Finance (ECO 221) ..... 6
ECO 315 International Taxation and National Tax Policy (ECO 211) ..... 6
ECO 316 Economics of the European Union (ECO 111) ..... 6
ECO 317 Topics in European Economics Integration (ECO 221) ..... 6
ECO 320 History of Economic Thought ..... 6

Note: Courses in brackets are prerequisites.

- One (1) Course (5 ECTS) from the Department of History and Archaeology from the list below.
- One (1) Course (6 ECTS) from the Department of Social and Political Sciences from the list below.
- One (1) Course (6 ECTS) from the Department of Law from the list below.
- Three (3) Courses (15 ECTS) in one language other than English.
- Three (3) Courses (18 ECTS) from AFN/BPA/HIS/LAW/SPS departments. Any course from AFN and BPA can be chosen. HIS, LAW and SPS courses can only be chosen from the catalogues below.


## Department of History and Archaeology (HIS)

Course Code and Title ..... ETCS
HIS 181 Introduction to European History (1789-1918) ..... 5
HIS 281 European Diplomatic History, 20th century ..... 5
HIS 283 European History 1945-1989 (HIS 181) ..... 5
HIS 285 Europe 1918-1945 (HIS 181) ..... 5
HIS 290 Institutions of Medieval Europe ..... 5
Note: Courses in brackets are prerequisites.
Department of Social and Political Sciences (SPS)
Course Code and Title ..... ETCS
SPS 152 Comparative Politics ..... 6
SPS 153 International Relations ..... 6
SPS 156 European Integration ..... 6
SPS 266 Political System of the European Union ..... 6
SPS 361 Cyprus and the European Union ..... 6
SPS 362 Politics of the European Union ..... 6
Department of Law (LAW)
Course Code and Title ..... ETCS
LAW 201 European Union Law l* ..... 6
LAW 202 European Union Law II* ..... 6
LAW 205 Public International Law I ..... 6
LAW 206 Public International Law II ..... 6

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## TABLE C: RESRTICTIVE ELECTIVE COURSES FOR THE PROGRAMME IN ECONOMICS

Restricted Elective courses offered by Department of Economics
Course Code and Title ..... ETCS
ECO 305 International Trade (ECO 211) ..... 6
ECO 306 International Finance (ECO 221) ..... 6
ECO 308 Economic Development (ECO 221) ..... 6
ECO 309 Economic Growth (ECO 221) ..... 6
ECO 310 Money, Banking and Financial Markets (ECO 221) ..... 6
ECO 311 Labour Economics (ECO 211) ..... 6
ECO 312 Industrial Organisation (ECO 211) ..... 6
ECO 313 Public Economics (ECO 211) ..... 6
ECO 315 International Taxation and National Tax Policy (ECO 211) ..... 6
ECO 316 Economics of the European Union (ECO 111) ..... 6
ECO 317 Topics in European Economics Integration (ECO 221) ..... 6
ECO 320 History of Economic Thought ..... 6
ECO 324 Introduction in Political Economy and Public Economics (ECO 211) ..... 6
ECO 327 Environmental Economics (ECO 211) ..... 6
ECO 331 Productivity and Technology (ECO 211) ..... 6
ECO 355 Topics in International Economics (ECO 211) ..... 6
ECO 362 Structure and Strategy of Firms (ECO 312) ..... 6
ECO 363 Regulation Theory and Policy (ECO 211) ..... 6
ECO 370 Topics in Financial and Monetary Economics (ECO 111, ECO 221) ..... 6
ECO 391 Placement in Organizations I ..... 6
ECO 392 Placement in Organizations II ..... 6
ECO 398 Topics on the Cyprus Economy (ECO 211, ECO 221) ..... 6
ECO 415 Game Theory (ECO 251 or ECO 261) ..... 6
ECO 473 Applied Econometrics (ECO253 or ECO263) ..... 6
Note: Courses in brackets are prerequisites.
Restricted Elective courses offered by other departments

1. All elective courses offered from the Department of Accounting and Finance (AFN) and the Department ofBusiness and Public Administration (BPA).
2. The following courses from the Department of Mathematics and Statistics:
Course Code and Title ..... ETCS
MAS 101 Calculus I ..... 8
MAS 102 Calculus II ..... 8
MAS 121 Linear Algebra I ..... 8
MAS 131 Basic Mathematics ..... 7
MAS 261 Probability I (MAS 101, MAS 102) ..... 7
MAS 262 Statistics I ..... 7
MAS 271 Numerical Analysis I ..... 7

Note: Courses in brackets are prerequisites.

## TABLE C: RESTRICTIVE ELECTIVE COURSES FOR THE PROGRAMME IN ECONOMICS (continuation)

## Notes:

a. Elective courses from the Department of Economics may not be offered when there is not sufficient demand or the required teaching staff.
b. Restricted elective courses include all courses offered by the Department and selected courses from other departments of the University.
Unrestricted elective courses can be any course offered by any other department of the University but must come from three different faculties.
Students can choose their restricted or unrestricted electives in any semester based on their schedule.
Courses can take more ECTS than listed in the examples above provided the total credit load does not exceed the permitted limits per semester.
c. Fourth year students can take up to two of the six postgraduate courses listed below, given that their grade point average is at least 7.5:

OIK 501 Microeconomic Analysis I (7. 5 ECTS)
OIK 502 Macroeconomic Analysis I (7.5 ECTS)
OIK 503 Statistics and Econometrics I (7.5 ECTS)
OIK 551 Microeconomic Analysis II (7.5 ECTS)
OIK 552 Macroeconomic Analysis II (7.5 ECTS)
OIK 553 Statistics and Econometrics II (7.5 ECTS)

## TABLE D: MINOR IN ECONOMICS

|  | ECTS |  |  | ECTS |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Compulsory Courses (42 ECTS) |  | ECO 310 | Money, Banking and Financial Markets (ECO 221) | 6 |  |
| ECO 111 | Principles of Microeconomics |  | ECO 311 | Labour Economics (ECO 211) | 6 |
| ECO 112 | Application of Quantitative Methods |  |  |  |  |
|  | in Economics (MAS 061) |  | ECO 312 | Industrial Organisation (ECO 211) | 6 |
| ECO 113 | Mathematics for Economists I | 7 | ECO 313 | Public Economics (ECO 211) | International Taxation and National Tax Policy |

Note: Courses in brackets are prerequisites.


## FACULTY OF ENGINEERING

Department of Architecture<br>Department of Civil and Environmental Engineering Department of Electrical and Computer Engineering Department of Mechanical and Manufacturing Engineering


www.ucy.ac.cy/arch/en

## DEPARTMENT OF ARCHITECTURE

Central to the philosophy of the programme in the study of architecture, are the synergies achieved through the dynamic synthesis of design emanating both from the humanities and the technological dimensions of Architecture. Such an endeavour takes place by emphasizing the complex and fascinating aspects of the field of Architecture. It also takes place through the formulation of a design culture that takes into account theoretical, historical, political and technological quests in order to redefine the role of architecture in the making of the artificial environment. Some of the challenges faced by architects in the academic and professional environment are how to define their new role with regards to the evolution of contemporary society as well as with their contribution to the manmade environment. At the same time, the Department of Architecture investigates diverse approaches that may contribute to the creation of contemporary architectural practices both with regards to the scale building, as well as the urban and territorial scales. The aim of the programme is the comprehensive theoretical and practical training of students, the development of critical thinking, and the acquisition of necessary skills and methodological tools for professional and academic progress and careers.

## CHAIRPERSON

Nadia Charalambous
VICE-CHAIRPERSON
Maria Philokyprou

## PROFESSOR

Marios C. Phocas
ASSOCIATE PROFESSORS
Nadia Charalambous
Christos Hadjichristos
Maria Philokyprou
Panayiota I. Pyla
Andreas Savvides
Socrates Stratis
ASSISTANT PROFESSORS
Odysseas Kontovourkis
Aimilios Michael

## LECTURERS

Konstantinos Avramidis
Popi lacovou

## INTRODUCTION

As an outstanding academic centre of studies in the wider European region, the Department of Architecture aims at educating students to become successful architects who will perform worldwide and have the knowledge and sensitivity to respond effectively to the formulation of the built environment in the eastern Mediterranean region. Graduates will have developed the necessary skills to meet both practical and theoretical aspects of architecture, will be well trained to work professionally and will be able to continue their academic studies either in Cyprus or internationally. They will acquire the theoretical and practical background in cutting edge technology, as well as sufficient architectural knowledge for expression in various scales of the building but also of urban developments and traditional and digital communication media of ideas and proposals.

## UNDERGRADUATE PROGRAMME

With design as the common factor in all conceptual subdivisions or categories, the four basic areas of study are: Architectural Theory and History, Architectural Communication Media, Architectural Technology and Urban Design.

The five years programme of studies leads to the acquisition of the Integrated Master in Architecture, which requires the completion of at least 300 ECTS, distributed as described in the relevant table. From these 300 ECTS, at least 15 ECTS must be elective courses (not included in the student's specialization), which must be taken from two different faculties of the University, while 10 ECTS should be taken from the programme of Foreign Languages.

The first four semesters introduce the subject through design studios of increasing architectural complexity, that develop the student's analytical and compositional skills, while the studios in the fifth and sixth semester focus on the urban and the technological respectively. A series of satellite courses in the four basic areas mentioned above enable students to accumulate the knowledge needed in order to respond effectively to the complex demands of any design project. The two design studios in the fourth year allow choice on the specific projects undertaken, and together with elective courses, give students the opportunity to pursue a deeper investigation into specific areas of their interest.

In the 9th and 10th semesters, the accumulation of at least 60 ECTS credits is required, from a combination of postgraduate courses and the design diploma thesis. In this context, the student must choose from at least two different fields of study, i.e. Architectural Theory and History, Architectural Communication Media, Architectural Technology, or Urban Planning, from a postgraduate course of choice respectively.

## DIPLOMA THESIS ADVISORS

At the beginning of the ARH 501 Advanced Design Studio 1 in the 9th semester, the student based on the intended subject of his/her work, must choose a team of diploma advisors, which usually consists of two faculty members of the Department of Architecture. The two faculty members agree to take on the role of diploma advisors.

The team of diploma advisors proposes the student's Diploma Committee to the Department Council. The Diploma Committee consists of two Diploma Advisors and one more member who may be from another Department of the University in a related field or from another Diploma Committee or other research centre. The Members of the committee must be selected based on their abilities to assist in the research of the student's dissertation.

## DIPLOMA THESIS

The final year of study requires a final thesis in architectural composition. The topic of the diploma thesis is chosen by the student in consultation with his diploma advisors. The duration of the diploma thesis is at least two semesters, the first of which is the research introduction to the subject. The topic is defined based on the Department's interests and the existence of necessary infrastructure and resources for its support.

The student develops the diploma proposal at the beginning of the academic year, upon enrollment. The proposal is approved by the diploma advisors and a Diploma Committee is set.

The student diploma advisors chair and coordinate the Diploma Committee. The support of the diploma thesis is open to the public and consists of a 30-minute presentation by the candidate, which may contain visual material, followed by a 30-minute open discussion. After the presentation, a closed-door meeting of the Diploma Committee takes place in order to make the final decision on the thesis.

If the work is considered satisfactory, the candidate must submit two original copies, one to the university library and one to the archives of the Department, as well as an electronic form (PDF) of the diploma thesis for the archive of the Department of Architecture for documentation and distribution. If the diploma thesis is rejected, the candidate has the right to request a retrial. In this case, the time and terms of the re-submission of the diploma thesis is set by the Diploma Committee according to the University's postgraduate studies regulation.

## COURSE DESCRIPTIONS <br> Compulsory Courses

ARH 100 Architectural Design I (10 ECTS)
Introduction to the basic concepts of Space, Form, Geometry, Proportions, Scale. The specific projects undertaken may not have an architectural scale or be sitespecific but will nevertheless aim at encouraging students to understand the complexity of the act of design, while becoming acquainted with different media and means of representation and communication. Studio supervision accompanied with relevant lectures from the instructors.

## ARH 101 Architectural Design II (10 ECTS)

## Prerequisite: ARH 100

Investigation and synthesis of Space, Form, Function for a site-specific project, which asks for an Architectural Design within both a social and an environmental context, and with an emphasis on climatic and micro-climatic issues. Problem solving skills. Development of a concept into a physical entity. Description and communication of the proposed scheme, using various media including Architectural Models. Studio supervision accompanied with relevant lectures from the instructors.

## ARH 110 Architecture in Context (5 ECTS)

An introductory course offering a panoramic view of the interdisciplinary nature of architecture in time, place and society. Students will be offered a framework within which they will effectively place any subsequent information in perspective, while students from other disciplines will have an opportunity to develop a more informed and appreciative way of looking at the work and products of Architectural Design.

## ARH 111 History of Architecture I (5 ECTS)

The course examines the history of Architecture from the Prehistoric period to the Renaissance. Growth and significance of architecture, the impact of developments in technology and construction, the artistic and spiritual ideals of specific civilizations. Concepts of Space and Form in Western and other civilizations.

## ARH 121 Architectural Communication Media II (5 ECTS)

Prerequisite: ARH 124
The course introduces students to the means of Visual Representation for the concept of performance in architecture. Musical instruments are used as a means to achieve this target. Students are introduced to the cosmos of musical instruments (musicians, orchestra, music, space of performance and rehearsal, etc.). Architectural themes are introduced in parallel through various exercises. Issues
of communication, and articulation of various aspects of the architectural project, taking into consideration the factor of time, are examined. The exercises require the use of various methods and means of representation: Freehand Drawing and Models for documenting relations in threedimensional form.

## ARH 124 Architectural Communication Media I (5 ECTS)

The course covers both Freehand and Technical Drawing. Sketching and drawing aim at introducing students to the basics of Pictorial Depiction and Visual Communication, while familiarizing them with the basic media. Line Weight and Surface Rendering using Shade and Shadow lead to the study of depth and the use of perspective in sketching the built, as well as the natural environment. The technical part of the course studies the Graphic Techniques for architects. Systems of Projection for plans, elevations and sections, isometric drawings, orthogonal and oblique projections, perspectives.

## ARH 200 Architectural Design III (10 ECTS)

## Prerequisite: ARH 101

Design of a building with a degree of complexity located at a specific site. Use of various design principles. Emphasis is placed on the Concept of Programming and the Use of Space. Students are introduced to the process of creating their own concept, which is translated into the building they design. The Social Framework, Materials, Structural and Construction Methods, context of Insertion are also explored. Lectures support the design studio.

## ARH 201 Architectural Design IV (10 ECTS)

## Prerequisite: ARH 200

Design of a building complex with a specified functional programme. Spatial configuration to accommodate the interaction of various user groups. Site Organization and Contextual Considerations. Research Component, Typologies. Elements of Interior Space, Light, Materials. Environmental considerations. A project of complexity requiring an increasingly holistic approach. Studio supervision accompanied by lectures.

## ARH 210 History of Architecture II (5 ECTS)

## Prerequisite: ARH 111

History of Architecture from 1750 to the present. Analysis of various concepts in architectural theory and practice and their relation to emerging beliefs, political and cultural transformations and social and technological processes. The role of the Enlightenment and Industrial Revolution in the advancement of Modern Architecture. Subsequent redefinitions of the modern, in different cultural contexts.

## ARH 211 Architecture and Society (5 ECTS)

## Prerequisite: ARH 210

Systematic analysis of the social and cultural dimensions of architecture. The complex relationships of public-private, natural and built environment.

## ARH 220 Digital Architectural Communication Media

 (5 ECTS)
## Prerequisite: ARH 124

Review of 2-D and 3-D Computer-aided Design Techniques. Generation of architectural drawings for a series of exercises involving design. Drafting, Modelling and Rendering through the use of software. Image Processing. Surface Textures and Lighting Conditions.

## ARH 222 Visual Culture (5 ECTS)

An investigation into the production/consumption of Images and their complex relationship with society. Oscillating between the Object and the Subject, the viewed is juxtaposed with who does the viewing, when, where and under what circumstances. In this context, images from art, advertisements or films are equally important and relevant as family photos.

## ARH 230 Construction I (5 ECTS)

Construction Design and Detailing in timber. Introduction to Timber Structures. Structural Systems Classification and basic principles of Skeleton Construction. Structure, exterior walls and openings, foundations, floor and roof conditions. Case studies on manufacture, construction, assembly and historical development of timber as building materials.

## ARH 233 Construction II (5 ECTS)

## Prerequisite: ARH 230

Construction Design and Detailing in reinforced concrete. Properties of concrete, physical composition, manufacture, formwork design. Massive and Skeleton Construction. Structure, Exterior Walls, Storey Slabs. Heat insulation and water proofing, plaster and other finishes. Sound Insulation and Shading Devices. Concrete formation for sun protection and lightweight elements.

## ARH 241 Theory of Urban Design (5 ECTS)

The course introduces students to the basic characteristics and definitions of the Urban Environment, through cultural and technological issues and relationships between various social forces. A register of contexts, within which the Urban Design is inscribed, is introduced (physical, temporal and pragmatic contexts). An emphasis is placed on the complexity and interdependency of those contexts. With this approach, theories and actions are presented
historically from the industrial period until today. There are references to examples of theory and practice with emphasis on the contemporary period.

ARH 300 Architectural Design V - Urban Design (10 ECTS) Prerequisites: ARH 201 and ARH 241
The course studies the Urban Design Project and makes use of the theoretical background on Urban Design taught in the previous semester. Looking at the various contexts, in which Urban Design is inscribed (physical, temporal and pragmatic), students are asked to develop strategies based on dynamic relations between analysis and proposal on an in-between scale of action (between building and city scale). Issues related to dynamics between local/translocal, temporary/permanent are significant for the project. Lectures support the design studio.

## ARH 301 Architectural Design VI - Architectural Technology (10 ECTS)

Prerequisites: ARH 300, ARH 330, ARH 332 and CEE 133
Architectural Design of a site-specific building of advanced technical requirements leading to 1:1 detailing. Focus on Architectural Technology, with accompanying lectures on the methodology of the integrative approach to design. Preliminary urban investigation, functional requirements and building form. Structure as primary component in Architectural Design, development of design alternatives. Building Envelope, Transparency, Selection of Systems and Materials, Technical Requirements. Integration of Technical Development Systems for environmental control of the interior, energy efficiency.

## ARH 310 History and Theory - Contemporary Architecture (5 ECTS)

New trends and directions in architecture. Critical analysis of the work and vision of leading architects and firms and new challenges in the theory/practice as related to technological innovations, epistimologies, aesthetic priorities, environmental concerns, and the changing relationships of global local.

## ARH 311 Vernacular Architecture and Contemporary Issues (5 ECTS)

Examination of urban and rural traditional settlements, with a particular focus on the architectural heritage of Cyprus. Comparisons with vernacular architecture in the broader Mediterranean region, as well as with the contemporary realities of Cyprus. Investigation into the particular social, economic and climatic factors and building techniques that shaped particular architectural expressions. Critical overview of the principles of historic preservation and consideration of methods for new interventions into an existing fabric.

ARH 312 Architecture and the Moving Image (5 ECTS)
This module introduces the moving image as a theoretical and design tool for the study, documentation and representation of space through time. Based on a transdiciplinary approach that derives theoretical, conceptual and practical knowledge from cinematic language, video-art, photography, video installation and performance, the module aims at cultivating critical thinking for the interpretation and construction of spatial narratives.

## ARH 330 Construction III (5 ECTS)

## Prerequisite: ARH 233

Construction Design and detailing in Steel. Metals, Physical Properties, Manufacture, Construction, Assembly. Primary Structure and Integration with Construction Elements. Structural System Classification and Design of Construction Elements and Connections. Building envelope, transparent, metal facade. Glass panes, physical and structural properties, metal sandwich panels, construction connections, cladding, curtain walls. Roof-facade section areas. Opening elements, windows, doors. Interior walls, ceilings, heat and sound insulation. Shading devices.

## ARH 331.1 Building Technology (5 ECTS)

Classifications of building types, functional requirements and building regulations. Structural Planning, Vertical and Horizontal load Bearing Systems, materials, construction, structure-function interaction. Construction Design, non-load-bearing elements (inner walls, ceilings, building envelope, cladding, curtain walls). Technical Development Systems, heating, air conditioning, water supply, electrical, vertical transportation systems. Health and safety considerations.

## ARH 332 Technical Development Systems (5 ECTS)

Introduction to the principles of heat transfer, sound propagation and photoelectric field. Mechanical and Electrical Building Systems for architects. Operating efficiency, analysis and design of building supporting systems, heating, ventilation, air conditioning, plumbing, power distribution, lighting, vertical transportation, acoustics.

## ARH 340 Landscape Architecture (5 ECTS)

Introduction to basic issues of Landscape Design. Natural and manmade parameters are introduced through historical and theoretical references, to demonstrate their influence on the landscape in general and on the garden specifically. Issues of time, topography, scale, vegetation, artificial and natural guide the course outline. Short project exercises on Landscape Design.

ARH 400 Architectural Design VII (10 ECTS)
Prerequisite: ARH 301
Advanced Architectural Design where students are encouraged to examine the programme and analyse the impact it may have on the various aspects of the resulting design. The apparently innocent description of the desired goals and needs is consequently examined in order to reflect on the paradigm it is based on, or the ideology it promotes. Depending on their interests, students have the opportunity to select a specific project approved by the instructor.

## ARH 401 Architectural Design VIII (10 ECTS)

## Prerequisite: ARH 400

Students are asked to research a topic of personal interest, form a programme and develop a design proposal that will be assessed for its soundness regarding all aspects of architecture, for its qualitative and quantitative efficiency, as well as the way in which the thesis is defended.

## ARH 410 Architectural Practice (5 ECTS)

The history of the profession. The nature of architectural practice, ethics, laws, codes, rules and regulations. The culture of the architectural profession. The architect and the client. The problems of the present and the challenges of the future.

## ARH 411 Advanced Architectural Theory (5 ECTS)

Defining Architectural Theory, problems and potential developments. Nature of Architectural Parameters and their relationships. Analytic and Normative Theories. Tradition, Reflective Thinking and Theory. Theory and practice. Architectural Hypotheses and Research. Epistemological investigations and the nature of architectural knowledge.

## Elective Courses

ARH 402 Special Topics in Architecture I (5 ECTS)
The subject will vary according to students' needs/requests and the educational and research interests of permanent and visiting faculty.

## ARH 403 Special Topics in Architecture II (5 ECTS)

The subject will vary according to students' needs/requests and the educational and research interests of permanent and visiting faculty.

APH 404 Advanced Architectural Design Studies I (5 ECTS)
The course engages with contemporary theoretical and applied architectural design issues. It aims at formulating methods for the enrichment of architectural research
through interdisciplinary and diverse approaches, as well as specific areas of knowledge.

## APH 405 Advanced Architectural Design Studies II (5 ECTS)

The course engages with contemporary theoretical and applied architectural design issues. It aims at formulating methods for the enrichment of architectural research through interdisciplinary and diverse approaches and specific areas of knowledge.

## ARH 412 Architecture and the Critical History of Ecology

 (5 ECTS)How have concepts of "Nature" and "Environment" influenced architectural thought and practice throughout history?Emphasis is placed on the 20th and 21st century debates on environment and sustainability, and the theoretical dimensions of them.

## ARH 413 Modernism - Global Impact (5 ECTS)

The complex connections between Architectural Modernism and the Politics of Modernization,
Decolonization, Urbanization and Globalization around the globe. The course uncovers the transnational dimensions of Modern Architecture and encourages cross-cultural inquiry.

## ARH 420 Portraits of Architecture (5 ECTS)

The course examines the way architecture is described or presented in literature, art and film. Ideological agendas, cultural norms and stereotypes, paradigms.

## ARH 421 Advanced Computer Aided Design (5 ECTS)

Prerequisite: ARH 220 or Corresponding Course from other Department
A course on CAD literacy. Animation in CAD, Modelling
Concepts, Camera Movements, Lighting Conditions, Special Effect and Digital Editing of animation sequences. CAD as a medium of communication as well as a design tool in architecture.

ARH 423 Creativity in Architecture through the Fine Arts (5 ECTS)
The course aims at introducing students to the fine arts domain and reconnecting them to creativity in architecture. Each academic year, the course will focus on different issues, such as scale and measurement of the body in space, colour and creating things in a direct manner.

## ARH 430 Earthquake Resistant Building Design (5 ECTS)

Prerequisite: CEE 133
Introduction to Earthquake Resistant Structures. Static and Dynamic Excitations, Earthquake Characteristics, Mechanic Properties of buildings, Building form and dimensions,

Horizontal Load Bearing Structures, Principles of Earthquake Resistant Design, construction design of Non-load-bearing Elements. New technologies for kinetic buildings with dynamic adaptability, structural control and earthquake isolation.

## ARH 431 Bioclimatic Design (5 ECTS)

Design of cost-effective, energy efficient buildings. Criteria for optimum exterior/interior environment and for the architectural, mechanical, electrical and building system components. Evaluation of energy conservation methods and renewable energy sources, active and passive solar systems.

## ARH 440 Architecture's Social Practices and their Political Agencies (5 ECTS)

The seminar addresses architecture as critical urban practice in the contemporary everydayness. It focuses on design practices for constructive conflict transformation by emphasizing the political dimensions of architecture in contested conditions of the city (social, geographical, ethnic). The students are exposed to examples of architecture agencies in supporting the urban commons. They study concepts such as negotiation, engagement, participation, exchange and conflict. The seminar makes explicit the multifarious synergies of architecture with other relevant critical fields.

## ARH 441 Contemporary Territorial Transformations and Urban Design (5 ECTS)

Globalization has added another level of operation to the contemporary city, transgressing the limits between centre and peripheries. The generation of all sorts of networks, visible and invisible, has created complex dynamics between urban elements, that used to operate only with their local territory, and new elements introduced by the networks. What is the role of the architect and planner in such cases? What methods of analysis of the existing urban conditions can detect such dynamics and how do they inform urban design?

## Architectural Theory and History

## ARH 500 Research Methodologies (8 ECTS)

The aim of the course is to introduce students to methodological approaches of Architectural research. It focuses on a thorough presentation and discussion concerning a) the philosophy of knowledge in general and with a particular emphasis on architecture; b) the definition of architectural research and theory and the identification of the conceptual background of research in relation to social values and their evolution; c) the dependence of conceptual tools and the research body on research intentions; and d) a comparison of methodologies.

The student is invited to develop the methodology appropriate to the thematic field which he has chosen as a direction. Based on the perception that the object of research and the method used are dependent on the general view of the world, the course attempts to "anchor" students to the general view of the world / research as it characterizes our era, to introduce them into the flow of today's "tradition of thinking," and to expose them to the "beliefs" of today's scientific community.

## ARH 501 Advanced Studio Design I (14 ECTS)

This is an advanced course in architectural design which includes the site selection, the study of the urban context and environmental impacts, as well as the development of the programme and relevant activities. The design project is addressed and developed taking into consideration the urban context, theoretical and historical architectural references, structural, building, and environmental factors. The student chooses the field of concentration according to his/her interests.

## ARH 502 Design Based Research (8 ECTS)

The course offers an overview of design research methods. Through specific examples, it allows students to think of creative ways to conduct and (re)present their own research and encourages them to adopt their own personal approach. The course attempts to combine theory with practice and to show how architectural synthetic thinking-as a combination of written and design discourse-can become a research method, leading to the production of new or the expansion of existing knowledge. The widely understood architectural creative practice is perceived as a way of questioning and critique, rather than as a response to given problems.

The course deals with the ontological, epistemological and, primarily, methodological formation of design research that results from the respective experimentation in other scientific and/or artistic disciplines. Design research — like that of the arts - relies on a variety of design tools to fully organize, process and express thought.

## ARH 503 Advanced Studio Design II (30 ECTS)

This is an advanced course in architecture design which includes the site selection, the study of the urban context and environmental impacts, as well as the development of the program and relevant activities. The design project is addressed and developed taking into consideration the urban context, theoretical, and historical architectural references, structural, building, and environmental factors. The student chooses the field of concentration according to his/her interests.

## ARH 504 Independent Study ( 8 ECTS)

Individual independent research or laboratory research supervised by a member of the academic staff.

## ARH 510 Theories of Architecture (8 ECTS)

The course aims to develop students' critical and thinking attitude towards architecture theory and praxis.

## ARH 511 Architecture and Ecology: Critical Perspectives ( 8 ECTS )

The main objective of the course is for students to develop a critical understanding of the socio-political dimension of environmental strategies. How have concepts of "nature," "resources", "resource conservation" and "environment" influenced architectural thought and practice? This history- theory of architecture course situates the development of ecological awareness, debate and practice in architecture within the larger historical and theoretical context of modern architecture. It covers topics from 19th Century back-to-nature movements, to early 20th century community experiments, to mid-twentieth century debates on science, technology, urbanization, postcolonial modernization and international development, all of which resonate with today's debates on environmental responsibility and shaped current notions of ecodevelopment, green architecture, sustainability, etc. During the course, the focus is on the relationships between specific concepts of nature and ecology and specific design or urban planning practices. This requires students to develop their critical thinking and develop the ability to "read between the lines" concerning various speculations/ rhetoric about the environment.

## ARH 516 Buildings in History (8 ECTS)

The course aims to develop critical methods of analysis of important architectural works of the past and to provide knowledge and methodological tools for their reuse and revival.

## ARH 517 Theory and Critical Approach on Conservation (8 ECTS)

The course aims to develop critical methods of analysis of important architectural works of the past and to provide knowledge and methodological tools for their conservation.

## ARH 518 Theory and Critical Approach, History and Criticism (8 ECTS)

Analysis of the changes of thoughts and ideologies in history from an architectural perspective. Presentation and comparison of historical contexts, as well as previous theories and practices. Discussion of alternative models of the "true" and development of a critical approach to the subjective nature of history.

## ARH 519 Advanced Topics in Architectural Theory and History (8 ECTS)

The topics vary depending on the needs and requirements of the students and the research interests of the professors.

## Architectural Communication Media

## ARH 520 Theoretical Investigations in Visual Communications (8 ECTS)

Theoretical study of the role of the image in art, architecture, cinema, and other related fields. Search and analysis of a common course of development and interaction between these related but distinct areas of cultural production.

## ARH 522 Advanced Computer Aided Design Topics Critical (8 ECTS

Integrated CAD/CAM tools and methodologies.
Algorithmic design, physical computing and robotic technology.

## ARH 524 Virtual Reality and The Built Environment (8 ECTS)

The course aims to develop students' critical and reflective thinking towards architectural theory and praxis.

## ARH 526 Perception and Cognition in Architecture

 (8 ECTS)The course studies the relationship between perception and knowledge in architectural experience. Analysis and critique of binary thinking that is based on the relationships between perception and knowledge, and involves binaries, such as nature/culture, construction/decoration, aesthetics/taste, etc

## ARH 528 Architectural Social Practices and Their Political Dimension (8 ECTS)

The course examines synergies between contemporary visual arts and architectural practices advocating for the public sphere. The seminar focuses on collaborative practices between visual arts and architecture (hybrid practices), that become agents for public engagement, emphasizing the political dimension of the urban environment. The students are exposed to best practices both in Cyprus and on an international level. They are invited to redefine their relation to the public domain through such practices and their tools.

## ARH 529 The Moving Image as Design Research Tool (8 ECTS)

This module draws on a spectrum of visual methodologies that relate to the understanding of the moving image as a tool for design research in architecture. Filming is approached as a spatial practice for the study and observation of architecture and urban phenomena, and for creatively documenting and reconstructing space and its lived experience as a dynamic environment. The module introduces a series of transdisciplinary methodologies, theories and practices from architecture, cinematic language, experimental documentary, essay film, narrative
and non-narrative structures, visual ethnography participatory design and performance. These methods enable the collection, documentation, transcription and interpretation of spatio-temporal and socio-political facts, relations, events and narratives. Bringing together filming practice and mixed media drawings (animations), the module aims to develop students' knowledge and skills for the critical use of the moving image in design research projects that concern the study, interpretation and communication of architectural ideas and spatial narratives where time plays a crucial role.

## Architectural Technology

## ARH 530 Advanced Building Technology (8 ECTS)

Analysis of architectural design derived mainly from structural engineering factors. Students will be introduced to studies that have delved into structural and building construction and environmental issues. A project study is prepared by each student, with emphasis on issues of building constriction.

## ARH 532 Construction Design (8 ECTS)

Integration of architectural technology with the design process and its objectives through construction. Transfer of technology in search of ideal applications, prototypes in design projects. Development of building details in the form of a studio.

## ARH 534 Structural Building Design (8 ECTS)

Attendance of lectures and participation in a studio with structural design exercises in groups

## ARH 536 Advanced Construction Materials Technology (8 ECTS)

Advanced studies in metals, adhesives, glasses, plastic, etc and their impact on the existing and future construction industry and the environment. Studies in applications of advanced materials and innovative building systems, by identifying technologies, processes and applications.

## ARH 538 Environmental Building Design (8 ECTS)

This course aims to develop the theoretical and applied knowledge of students in the object of Environmental Building Design and highlights the role of architectural design, construction and appropriate technical support in ensuring proper living conditions, in minimizing energy consumption and reducing adverse environmental impacts.

## ARH 539 Advanced Topics in Architectural Technology (8 ECTS)

The course focuses on energy efficient design of contemporary building envelopes. Emphasis is given on
the mechanisms of heat transfer, the basic environmental design principles (lighting, ventilation, climatic adaptability), and the integration of hybrid systems and RES technologies in the design of double-skin facades or ceilings. The aim of the course is for students to develop an energy orientated design methodology in the case of highperformance building envelopes.

## ARH 550 Special Topics on Recording and Documenting Buildings and Sites (8 ECTS)

It aims at introducing research tools and methodological approaches of in-situ recording and documenting of buildings and urban sites, as well as individual structural and morphological building elements, while it includes methodologies for the classification, evaluation and processing of monitoring data.

## Urban Planning

ARH 540 Mediterranean Cities and Social Issues (8 ECTS)
The course focuses on the understanding of the ways in which urban social phenomena both influence and are influenced by the morphology and planning of the city. Emphasis will be given on the formulation of novel readings, methodologies and interpretations of the multiple and complex cultural practices in Mediterranean urban space in an attempt to enrich and broaden knowledge and urban design processes.

## ARH 542 Space Syntax (8 ECTS)

Analysis of indoor and outdoor characteristics with qualitative and quantitative research methods. Postresidential evaluation studies of specific projects, comparing the proposed and actual uses of different spatial formations. The output of the analysis varies from houses to building complexes and from small public spaces to large urban centers.

## ARH 544 Urbanism in History (8 ECTS)

Examination of specific topics in the history of Urbanism through the study of its intellectual and social context. Focus oscillates between utopian and theoretical to religious and political manifestations of Urban Design. Content and methodology emphasize as well as rely on an inter-disciplinary approach to the subject, and are inclusive, but not exhaustive of, literature, poetry, painting, music, and cinema.

## ARH 546 Urban Design and Planning (8 ECTS)

Investigation of planning principles necessary for the communication between architects, urban designers and urban planners when dealing with contemporary urban complexity.

ARH 548 Landscape Architecture and the Urban (8 ECTS)
The course examines the multi scalar understanding of the processes that help to read and build the environment through sustainable systems and the role of landscape architecture in this process. The sociotechnical role of green infrastructure development within urbanization processes. Critical understanding and interpretation of the landscape architecture components that define resilient and sustainable processes in urban parks.

## ARH 549 Special Topics in Urban Planning and Design (8 ECTS)

Subjects in this course will vary according to students' needs or requests and the faculty's educational and research interests.

## ARH 602-609

ECTS is allocated by the thesis supervisor
Postgraduate research leading to the completion of a doctoral dissertation.

## General Elective Courses offered to Civil and Environment Engineering Students

## ARH 123 Civil Engineering Graphics (5 ECTS)

Study and application of drawing and other graphic communication techniques for engineers: Systems of Projection for the production of Construction Documents (plans, elevations and sections), Isometric Drawings, Perspective, Freehand Sketching from Technical Drawings, Scaling. Computer-aided Design.

## ARH 331.2 Building Technology (5 ECTS)

Classifications of building types, functional requirements and building regulations. Structural Planning, Vertical and Horizontal Load Bearing Systems, materials, construction, structure-function interaction. Construction Design, Non-Load-Bearing Elements (inner walls, ceilings, building envelope, cladding, curtain walls). Technical Development Systems, heating, air conditioning, water supply, electrical, vertical transportation systems. Health and safety considerations.

## ANALYTICAL PROGRAMME OF STUDIES

|  | ECTS |
| :---: | :---: |
| 1st YEAR |  |
| 1st Semester |  |
| ARH 100 Architectural Design I | 10 |
| ARH 110 Architecture in Context | 5 |
| ARH 124 Architectural Communication Media I | 5 |
| CEE 130 Structures I | 5 |
| LAN 100 General Advanced English | 5 |
| TOTAL | 30 |
| 2nd Semester |  |
| ARH 101 Architectural Design II | 10 |
| ARH 111 History of Architecture I | 5 |
| ARH 121 Architectural Communication Media II | 5 |
| CEE 133 Structures II | 5 |
| LAN 102 English for Architecture | 5 |
| TOTAL | 30 |
| YEAR TOTAL | 60 |
| 2nd YEAR 3rd Semester |  |
|  |  |
| ARH 200 Architectural Design III | 10 |
| ARH 210 History of Architecture II | 5 |
| ARH 220 Digital Architectural Communication Media | 5 |
| ARH 222 Visual Culture | 5 |
| ARH 230 Construction I | 5 |
| TOTAL | 30 |
| 4th Semester |  |
| ARH 201 Architectural Design IV | 10 |
| ARH 211 Architecture and Society | 5 |
| ARH 233 Construction II | 5 |
| ARH 241 Theory of Urban Design | 5 |
| CEE 241 Reinforced Concrete Structures | 5 |
| TOTAL | 30 |
| YEAR TOTAL | 60 |
| 3rd YEAR <br> 5th Semester |  |
|  |  |
| ARH 300 Architectural Design V - Urban Design | 10 |
| ARH 312 Architecture and the Moving Image | 5 |
| ARH 330 Construction III | 5 |
| ARH 332 Technical Development Systems | 5 |
| ARH 340 Landscape Architecture | 5 |
| TOTAL | 30 |

6th Semester
ARH 301 Architectural Design VI - Architectural Technology ..... 10
ARH 310 History and Theory - Contemporary Architecture ..... 5
ARH 311 Vernacular Architecture and Contemporary Issues ..... 5
ARH 331.1 Building Technology ..... 5
ARH 4xx Constrained Elective Course ..... 5
TOTAL ..... 30
YEAR TOTAL ..... 60
4th YEAR
7th Semester
ARH 400 Architectural Design VII ..... 10
ARH 410 Architectural Practice ..... 5
ARH 4xx Restricted Elective Course ..... 5
ARH 4xx Restricted Elective Course ..... 5
Elective Course ..... 5
TOTAL ..... 30
8th Semester
ARH 401 Architectural Design VIII ..... 10
ARH 411 Advanced Architectural Theory ..... 5
ARH 4xx Constrained Elective Course ..... 5
Elective Course ..... 5
Elective Course ..... 5
TOTAL ..... 30
YEAR TOTAL ..... 60
5th YEAR
9th Semester
ARH 501 Advanced Studio Design I ..... 14
ARH 5xx Constrained Elective Course ..... 8
ARH 5xx Constrained Elective Course ..... 8
TOTAL ..... 30
10th Semester
ARH 503 Advanced Studio Design II ..... 30
TOTAL ..... 30
YEAR TOTAL ..... 60
GRAND TOTAL ..... 300

## ELECTIVE COURSES

| ECTS |  |  |  | ECTS |
| :---: | :---: | :---: | :---: | :---: |
| Fall Semester |  | Spring Semester |  |  |
| ARH 402 Special Topics in Architecture I | 5 | ARH 403 | Special Topics in Architecture II | 5 |
| ARH 404 Advanced Architectural Design Sudies I | 5 | ARH 405 | Advanced Architectural Design Sudies II | 5 |
| ARH 412 Architecture and the Critical History |  | ARH 413 | Modernism - Global Impact | 5 |
| of Ecology | 5 | ARH 421 | Advanced Computer-Aided Design | 5 |
| ARH 420 Portraits of Architecture | 5 | ARH 423 | Creativity in Architecture through the |  |
| ARH 430 Earthquake Resistant Building Design | 5 |  | Fine Arts | 5 |
| ARH 440 Architecture's Social Practices and |  | ARH 431 | Bioclimatic Design | 5 |
| their Political Agencies | 5 | ARH 441 | Contemporary Territorial Transformations and Urban Design | 5 |
|  |  | CEE 345 | Steel Structures | 5 |


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## DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

Civil and Environmental Engineering plays a significant role in building a sustainable future for society. The discipline is involved with the design, construction, management and maintenance of the infrastructure on which society relies. In addition to the buildings in which we live and work, the roads and the bridges we use every day, we depend on civil and environmental engineers to provide clean water, energy solutions and waste management and, at the same time, to protect the natural environment.

## CHAIRPERSON

Marina Neophytou
VICE-CHAIRPERSON
Dimitrios Loukidis

## PROFESSORS

Ioannis loannou
Despo Fatta-Kassinos
Marina Neophytou
Panos Papanastasiou
Michalis Petrou
Symeon Christodoulou

## ASSOCIATE PROFESSORS

Dimos Charmpis
Petros Komodromos
Dimitrios Loukidis

## ASSISTANT PROFESSORS

Loukas Dimitriou
Panayiotis Roussis

## LECTURERS

Nicolas Hadjipantelis
Marios Mavros
Dimitris Stagonas
Argyro Tsipa

## INTRODUCTION

The Department of Civil and Environmental Engineering offers degree programmes at both undergraduate and postgraduate levels. Our students learn in a dynamic environment and have the opportunity to work with and learn from research teams at the forefront of science and technology. The department programmes emphasize fundamental principles, so that our graduates are fully qualified engineers, able and ready to assume leading positions in today's rapidly changing environment with all its problems, challenges and opportunities.

## CAREER OPPORTUNITIES

There are many professional opportunities for Civil and Environmental Engineers in both the private and the public sector. Graduates may pursue careers in design, construction, maintenance, building management and infrastructure, as well as in research and development.

## AREAS OF RESEARCH

Research in the Department of Civil and Environmental Engineering focuses on the following areas:

- Construction Materials
- Structural and Earthquake Engineering
- Construction Management
- Computer-Aided Civil Engineering
- Geotechnical Engineering
- Transportation Systems
- Management of Water Resources
-Environmental Fluid Mechanics
- Solid and Liquid Waste Management
- Environmental Pollution Control
- Environmental Management Systems
- Subsurface Remediation
- Environmental Biotechnology


## UNDERGRADUATE DEGREE PROGRAMME

The Department covers the traditional areas of Civil Engineering such as structures, building materials, earthquake engineering, construction management, geotechnical engineering, transportation and hydraulics, as well as environmental issues such as protection of water resources, air pollution and management of solid and liquid waste. These areas have a direct impact on health and safety, tourism and the local economy. The combination of Civil and Environmental Engineering disciplines is of immense importance, since most of these areas overlap and impact on each other.

The programme of studies at the Department of Civil and Environmental Engineering is based on the European

Credit Transfer and Accumulation System (ECTS), which has been adopted by the University.
The programme of studies focuses on giving students a strong foundation in Mathematics, Physics and Mechanics during the first two years; a good grounding in these areas is necessary before undertaking the applied and advanced topics covered in the following years. In their third year, students take applied courses in the field of Civil and Environmental Engineering, while in the fourth year they may choose from a wide array of advanced courses according to their individual interests. In their fourth year, students must complete a capstone design project, a comprehensive Civil and Environmental Engineering project that covers a wide spectrum of areas within the discipline.

The degree awarded to successful students is the Bachelor of Science (B.Sc.) in Civil and Environmental Engineering.

## DEGREE RECOGNITION

The degree (B.Sc.) in Civil and Environmental Engineering is fully recognized by the Scientific and Technical Chamber of Cyprus (STCC), enabling the holder to become a member of STCC according to the applicable terms and thus to obtain the professional status and privileges of a Civil Engineer.

## DEGREE REQUIREMENTS

The course of study leading to the B.Sc. Degree in Civil and Environmental Engineering requires the completion of at least 240 ECTS, distributed as follows:

- Mandatory Courses (195 ECTS)
- Three Free Elective Courses (15 ECTS)
- Six Restricted Elective Courses (30 ECTS).

The free elective courses are to be taken from at least two different faculties in the University of Cyprus (excluding the Faculty of Engineering); this ensures that students are exposed to different disciplines. The restricted elective courses are specialized and advanced courses in the Department.

Additionally, the six restricted elective courses must be distributed as follows:

## - Three Restricted Elective Courses related to Civil Engineering from the following list:

CEE 401 Software Development for Engineering Application
CEE 411 Construction Management II
CEE 417 Fundamentals of Operations Research
CEE 432 Masonry Building Materials
CEE 441 Advanced Topics on the Design of Steel Structures
CEE 442 Prestressed Concrete

## CEE 450 Geomechanics

CEE 451 Engineering Geology
CEE 475 Design of Hydraulic Systems
CEE 496 Advanced Topics in Civil Engineering

## - Three Restricted Elective Courses related to Environmental Engineering selected from the following list:

CEE 401 Software Development for Engineering Application
CEE 417 Fundamentals of Operations Research
CEE 470 Water Resource Management
CEE 477 Coastal Engineering
CEE 480 Wastewater Management
CEE 483 Transport Processes in Environmental Engineering
CEE 494 Advanced Topics in Environmental Engineering
CEE 495 Advanced Topics in Environmental Engineering
CEE 497 Biological Systems Engineering
It should be noted that Independent Study (CEE 492 or CEE 493) is offered to exchange programme students only.

In special circumstances and after prior approval by the Undergraduate Committee of the CEE Department, a student may be credited up to 5 ECTS that correspond to restricted elective courses through courses offered by other departments, in addition to the 15 ECTS of the required elective courses, or through a graduate course offered by the Department of Civil and Environmental Engineering.

Within the terms of an exchange programme, and only after approval by the Departmental Board following a written request by the student, an undergraduate student may attend up to two semesters at another University with a study load per semester ranging between 25 and 30 ECTS.

Upon the approval of the Undergraduate Committee of the CEE Department, an undergraduate student may be credited up to 120 ECTS for previous undergraduate studies following a justified petition by the student, signed by his/her academic advisor.

## COURSE DESCRIPTIONS

## Compulsory Courses

CEE 101 Engineering Mechanics (5 ECTS: 3-0-6)
Principles of Mechanics. Types of loads, structures and supports. Inner and outer products, product of three vectors, moment of force. Collinear, coplanar and parallel forces, calculation of resultant force and moment, body equilibrium, translation and rotation. Determination of support reactions. Calculation of axial force, shear force and
moment diagrams in beams. Determination of center of gravity and moments of inertia. Normal and shear stresses and strains, elastic modulus, shear modulus, Poisson's ratio. Distribution of normal and shear stresses in a cross-section.

## CEE 113 Land Surveying (5 ECTS: 3-2-4)

Introduction. Coordinate Systems. Measurement methods and units. Basic Surveying Equipment. Errors and calculations. Levelling. Control Surveys. Principles of Distance and Angle measurements. Theodolites and their use. Setting out. Earthwork quantities. Topography and Mapping. Global Positioning Systems (GPS). Geographical Information Systems (GIS). Applications of surveying in the construction industry. Practical exercises on campus: Levelling. Total stations; GPS.

## CEE 121 Structural Analysis I (5 ECTS: 3-0-6)

Types of Structural Systems. Forces and Types of Loads. Supports. Equations of Static Equilibrium. Free-body Diagrams. Internal forces. Stability and Determinacy of Structures. Complex Structures. Principle of Superposition. Symmetric Structures. Analysis of Determinate Trusses. Stability and Determinacy of Trusses. Method of Joints. Method of Sections. Analysis of Determinate Beams and Frames. Internal forces in plane beams and frames. Bending-moment, shear-force and axial-force curves. Relationship between Load and Internal Forces. Elastic Curve of Beams and Frames. Cables. Arches. Influence lines for determinate trusses, beams and frames. Geometric Methods for Computing Deflections in Determinate Structures.

CEE 201 Numerical Methods in Engineering (5 ECTS: 3-0-6)
Computer Arithmetic. Approximation. Round-off and Truncation Errors. Solution of Nonlinear Equations. Solution of Systems of Linear Equations using direct and iterative methods. Matrix Inversion. Solution of Systems of Nonlinear Equations. Matrix Eigenvalues and Eigenvectors. Interpola-tion using Polynomial Functions and Splines. Least-squares Regression. Numerical Differentiation and Integration. Differential Equations - initial value problems. Software implementation and usage with numerical applications in problems from the area of Civil and Environmental Engineering.

## CEE 220 Structural Analysis II (5 ECTS: 3-0-6)

## Prerequisite: CEE 121

Differences between Determinate and Indeterminate Structures. Indeterminacy of Structures. Energy Methods for Computing Deflections. The Flexibility Method. Concept of a Redundant. Released Structure. Elastic curve of indeterminate structures. Compatibility Equation. Flexibility Coefficients. Support settlements. Temperature change. Fabrication errors. Elastic supports. Symmetric Structures. Kinematic indeterminacy of structures. Degrees of Freedom. The slope-deflection Method. Free and
restrained joints. Slope-deflection Equations. Fixed-end Moments. Stiffness Coefficients. Moment Distribution Method (Cross). Influence lines for indeterminate beams and frames. The Müller-Breslau Principle.

## CEE 221 Matrix Structural Analysis (5 ECTS: 3-0-6)

## Prerequisite: CEE 220

Introduction to Flexibility Methods. Analysis of Determinate and Indeterminate Trusses and frames with Flexibility Methods. Graphical solution with Flexibility Methods. Stiffness Matrices for springs, bars and beams. Transformation Matrices. Local and Global Coordinate systems. Analysis with the Direct Stiffness Method. Boundary Conditions. Inclined Supports. Constraints. Graphical solution using the Stiffness Method. Software implementation of the direct Stiffness Method. Elements with member-end releases. Static condensation. Introduction to analysis using a professional structural analysis programme. Inclined supports.

## CEE 230 Strength of Materials (5 ECTS: 3-0-6)

Stress and strain definitions, elastic behaviour of solids. Axial loading. Engineering Beam Bending Theory. Engineering Theory of Torsion. Stress, strain analysis, plane and 3D analysis. Skew Bending. Bending and compression. Shear and torsion of thin-walled cross-sections due to bending. Buckling and stability of beams. Uniaxial elastoplastic behaviour of solids. Elasto-plastic behaviour under axial loading, bending and torsion of beams. Yield and failure: von Mises and Mohr-Coulomb.

## CEE 231 Construction Materials (5 ECTS: 3-1-5)

Introduction to the major materials used in construction. Materials Engineering Concepts. Nature of materials. Physical and mechanical properties of materials. Aggregates. Aggregate properties. Portland Cement. Cement-based materials. Concrete components and microstructure. Properties of fresh and hardened concrete. Strength, durability, and failure mechanisms. Proportioning concrete mixes. Quality control. Special concrete mixes. Steel and other metals. Structural and reinforcing steel. Wood. Masonry. Composites.

## CEE 232 Strength of Materials' Laboratory (2.5 ECTS: 0-2-3)

Introduction. Methods and Standards of testing materials. Material properties and mechanical behaviour. Ductility and Brittleness. Failure Mechanisms. Laboratory Tests: Measurement of dimensions. Tension, compression, hardness, torsion, shear, bending and fatigue tests. Creep, relaxation and impact testing. Non-destructive testing. Sensors and Strain Gauges.

## CEE 233 Construction Materials - Laboratory (2.5 ECTS: 0-2-3)

Aggregate sieve analysis, Density and water absorption of aggregates, Aggregate soundness, Los Angeles test, Micro-

Deval test, Concrete mix design, Concreting and curing of concrete specimens, Mechanical properties of hardened concrete.

## CEE 251 Soil Mechanics (5 ECTS: 3-0-6)

Introduction to Soil Mechanics. Soil formation classification and mineralogy. Characteristics and engineering properties of soil: density, strength and deformability, water content, Atterberg limits, permeability and seepage. Sub-surface soil investigation. Soil-water movement. Mechanical behaviour of a soil element. Description of the state of stress at a point in soil. Effective stress, consolidation, and soil strength, Mohr circle. Stress-strain relationships under different loading conditions. Unconfined and triaxial compression. Simple shear and shear strength of a soil element. Mohr-Coulomb failure criterion. Applications: Slope stability.

CEE 253 Soil Mechanics - Laboratory (2.5 ECTS: 0-2-3)
Soil Classification Methods. Determination of physical and mechanical properties of soils. Laboratory tests: determination of plasticity and liquidity limits, compaction test, sand cone test, measurement of hydraulic conductivity, direct shear test, consolidation test, triaxial compression test.

## CEE 270 Fluid Mechanics for Civil and Environmental Engineers (5 ECTS: 3-0-6)

## Prerequisite: PHY 134

Introduction to Fluid Mechanics and its applications. Fluid statics, control volume approach, mass conservation and steady flow momentum equation, Bernoulli's Theorem, curved streamlines. Laminar and turbulent flow, boundary layer, friction in laminar and turbulent flow. First law of thermodynamics; flow heat transfer. Similarity, dimensional analysis, Model Tests.

## CEE 272 Fluid Mechanics' Laboratory (2.5 ECTS: 0-2-3)

## Prerequisite: PHY 134

Introduction to health and safety issues for Fluid Mechanics experiments. Flow visualisation techniques. Fluid viscosity measurement. Hydrostatic force measure-ment on inclined surfaces. Measurement of drag force on spheres in settling. Investigation of laminar and turbulent flow characteristics. Investigation of jet impact. Investiga-tion of Bernoulli's Theorem. Measurement of lift and drag in wind tunnel.

## CEE 310 Construction Management I (5 ECTS: 3-0-6)

Selection, operational analysis, utilization and replacement of equipment for civil engineering works. Engineering economy. Project planning, scheduling and controlling. Budgeting, resource and cost allocation, cost control and time-cost trade off analysis of construction projects. CPM/PERT analysis. Health and safety measures during construction. Term project using specialised computer software for construction applications.

## CEE 320 Dynamics of Structures (5 ECTS: 3-0-6)

## Prerequisite: CEE 220

Dynamic Loading. Inertia Forces. Single-degree-of-freedom systems. Equation of motion. Fundamental Frequency. Stiffness for Linearly Elastic Systems. Damping. Free and forced vibration of single-degree-of-freedom systems. Dynamic response to harmonic, periodic and arbitrary excitations. Numerical evaluation of dynamic response. Earthquake response of Single-degree-of-freedom Linear Systems. Response spectrum. Elastic design spectrum. Free vibration of Multi-degree-of-freedom Systems. Natural frequencies and mode shapes. Mass and stiffness matrices. Forced vibration of Multi-degree-of-freedom Systems. Method of modal superposition. Response Spectrum Analysis.

## CEE 325 Computer-Aided Structural Analysis

 ( 5 ECTS: 3-0-6)
## Prerequisites: CEE 221 and CEE 320

Software implementation of the basic Static and Dynamic Structural Analysis Methods. Construction of Response Spectra. Numerical simulation of shake-table experiments. Computer-based spectral and dynamic analysis of buildings. Usage of structural analysis software for the static and dynamic analysis of structures. Simulations of buildings under earthquake excitations. Foundations and elastic supports. Structural analysis software development. Utilization of specialized structural analysis software and special topics in computer-aided Engineering. Introduction to finite element methods.

## CEE 340 Design of Reinforced Concrete Members

 (5 ECTS: 3-0-6)
## Prerequisites: CEE 121 and CEE 230

Introduction to Reinforced Concrete and Design Process. Safety factors and loading. Materials. Flexural design of rectangular and T-Beams. Shear and torsional design. Columns. Interaction diagrams. Laboratory experiments: construction and testing of reinforced concrete beams.

CEE 341 Design of Reinforced Concrete Structures (5 ECTS: 3-0-6)

## Prerequisite: CEE 340

Development, anchorage and splicing of reinforcement. Serviceability. Continuous beams and one-way slabs. Moment redistribution. Different types of slabs. Elastic analysis of slabs. Yield line analysis of slabs. Design of slabs. Footings. Deep beams and corbels. Retaining walls. Basic concepts of seismic design of reinforced concrete structures.

## CEE 342 Design of Steel Structures (5 ECTS: 3-0-6)

## Prerequisite: CEE 230

Introduction to Steel Structures Technology. Iron, steel and aluminum alloys. Properties of structural steels. Methods of welding. Loadings on steel structures. Design criteria.

Design of members that are in tension, compression, shear, bending and torsion. Design of steel connections. Static and dynamic analysis of steel trusses and frames. Design of steel structures. Modern steel design codes.

CEE 353 Foundation Engineering (5 ECTS: 3-0-6)
Prerequisite: CEE 251 or CEE 253
Foundation design principles. Selection of foundation type. Bearing capacity and settlements of shallow foundations. Admissible settlements of structures. In-situ tests for the design of foundations. Spread footings, combined footings, beams on elastic foundations, raft foundations. Retaining walls and earth pressure theories. Slope stability. Deep foundations. Piled foundations and construction methods. Bearing capacity and settlements of piles.

## CEE 370 Hydraulics (5 ECTS: 3-0-6)

Fundamental laws of Fluid Mechanics. Fluid properties. Laminar and Turbulent Flows. Basic principles of Hydraulic Engineering. Hydraulic Measurements. Pipe and Open Channel Flows. Water demand and supply.

## CEE 371 Hydrology (5 ECTS: 3-0-6)

Overview of Hydrological Cycle. Precipitation, evaporation, infiltration, runoff analysis, flood routing and the water balance. Statistical procedures in Hydrology. Urban Hydrology. Introduction to mathematical models of medium and large watersheds. Application of hydrology to design of outlet works and flow control structures.

## CEE 381 Introduction to Environmental Engineering

 (5 ECTS: 3-0-6)Introduction to Environmental Engineering, technical calculations, pollution control programs, samplings, pollution parameters, contaminants of emerging concern, material balances, energy fundamentals, biogeochemical cycles, water pollution, eutrophication, water and wastewater management, air pollution, solid waste management.

## CEE 383 Environmental Impact Assessment

(5 ECTS: 3-0-6)
Environmental impact assessment from projects and anthropogenic activities. Cyprus and European legislative framework. Methodologies for the estimation of the impact on air, soil, water, flora and fauna. Case studies.

## CEE 400 Earthquake Engineering (5 ECTS: 3-0-6)

## Prerequisite: CEE 320

Fundamentals of Engineering Seismology. Faults, earthquakes and seismic waves. Accelerograms and characterization of ground motion. Site effects and directivity. Elastic and inelastic response of oscillators. Elastic and inelastic response spectra. Design spectrum. Ductility and strength-reduction factor. Seismic response of Multi-degree-of-freedom Systems using modal response
analysis. Principles of earthquake resistant design and Eurocode 8 provisions. Introduction to structural control and seismic isolation. Term project.

CEE 460 Transportation Engineering (5 ECTS: 3-0-6)
Application of physical laws of motion and energy as they relate to calculations of resistances to motion, power, and energy requirements. Acceleration-Deceleration Limits. Capacity of various modes of Transportation. Techniques of analysis and planning for transportation services. Demand-supply interactions. Evaluation of transportation alternatives. Integrated Model Systems. Demand estimates for transportation system. Location, design, and operations of transportation facilities. People participation in decision making; proposal writing.

## CEE 461 Road Design and Construction (5 ECTS: 3-0-6)

Theories of Flexible and Rigid Pavement Design. Equivalent wheel loads. Strength tests. Frost and high temperature action. Spatial Design. Methods of Road Tracing and Design. Earthwork: sections, earth movements and distribution. Environmental concerns. Practices in monitoring, maintaining, and rehabilitating flexible and rigid pavement systems.

## CEE 490 Thesis: Capstone Design Project I (5 ECTS: 1-2-6)

Prerequisites: Senior status or advisor's approval, CEE 341, CEE 342, CEE 353 and ARH 331
The project (a two-semester Senior Capstone Design experience in Civil Engineering) is intended to serve as a capstone experience in preparing students to address challenging engineering issues: it requires student collaboration and integration of their engineering knowledge from various thematic areas. In the first semester, a project involving integration of the Civil Engineering subdisciplines will be described and presented. Students will work on preparing engineering design and environmental impact assessment studies for the project. Lectures will present specialized topics and specific design applications, that may not have been addressed in other courses.

CEE 491 Thesis: Capstone Design Project II (5 ECTS: 1-2-6)
Prerequisites: senior status or academic advisor's approval, CEE 310 and CEE 490
This is a continuation of the course CEE 490. Lecture sessions will be used to present specialized material of relevance to the project(s) assigned and will allow student groups to present progress reports on their work. Each group will be expected to prepare a complete design report, addressing all assigned aspects of the project with functional design drawings and specifications, environmental studies, construction schedules, cost estimates, and health and safety plans. All projects will include a written report, and they will be orally presented and defended. The projects must be of sufficient depth and incorporate the state-of-the-art in the subject topics.

## Restricted Elective Courses

## CEE 401 Software Development for Engineering Application (Open Elective Course) (5 ECTS: 3-0-6)

## Prerequisite: CS 033 or equivalent

Introduction to Computer-aided Engineering. Objectoriented Software Design and Development for engineering applications, using C++, Java, or/and C\#. Software implementation of common numerical methods and algorithms. Usage of data structures and databases in Engineering Modelling, Visualization and Internet Computing. Modern methodologies for designing and developing engineering simulators. Term project: Implementation of a software solution that addresses a practical engineering problem.

## CEE 411 Construction Management II (5 ECTS: 3-0-6)

Prerequisite: CEE 310
Construction contracts. Conflict resolution and negotiations. Organization and administration. Planning, estimating, control and risk assessment. Quantity surveying. Labor and equipment estimates. Estimating excavation and concrete. Tender preparation. Software Packages for Project Management. Accounting and control. Economic evaluation of construction projects. Construction Finance. Fully Integrated and Automated Project Processes (FIAPP). Term project: proposal preparation, where students use contract documents and software tools.

## CHE 417 Fundamentals of Operations Research

 ( 5 ECTS: 3-0-6)Introduction to operations research, rational decision making and the concept of optimization. Presentation of typical operations research problems and the fundamentals and basic methodologies applied for their handling. Linear programming: mathematical formulation of problems, graphical solution, Simplex algorithm and other solution methods, dual problem, sensitivity analysis. Integer programming: mathematical formulation of problems, graphical solution, solution algorithms. Introduction to non-linear programming: single- and multicriteria optimization. Special problem types: transportation problem, assignment problem, location problem, etc. Systems optimization. Solution of operations research problems using software (Matlab). Examples and practical applications covering a wide range of decision-making problems using operations research methods.

## CEE 432 Masonry Building Materials (5 ECTS: 3-0-6)

Building Stones: classification, selection, factors affecting durability and weathering, porosity, capillary absorption, measurement of physiomechanical properties, preventive and remedial measures, Cyprus building and decorative stones. Mortars and Renderings: plasters, limes, typical mix proportions, specification of plaster and render mixes for special applications, effect of $w / b$ ratio and binder content,
hydraulic and non-hydraulic binders and mortars. Concrete Blocks and Bricks: aggregate blocks, AAC blocks, manufacture, classification and use, strength, quality, thermal properties, drying shrinkage, durability. Ceramics: clay bricks, clay and shale consultants, brick forming and firing, properties of bricks, problems, moisture expansion, durability, designation. Adobe and Mud Bricks: pathology and deterioration problems.

## CEE 441 Design of Steel Structures II (5 ECTS: 3-0-6)

## Prerequisite: CEE 342

Torsional, lateral, and lateral-torsional buckling of steel elements. Elastic and inelastic stability of steel frames. Design of steel members and structures against buckling. Composite members and their connections. Methods of construction and erection. Maintenance and fire protection. Integrated design of Steel Structures. Term project.

## CEE 442 Prestressed Concrete (5 ECTS: 3-0-6)

## Prerequisite: CEE 340

Basic concepts of prestressed concrete. Materials and systems for prestressing. Load balancing method. Prestress losses. Flexural analysis. Flexural, shear, and torsional design. Anchorage systems. Indeterminate prestressed concrete beams. Concordant tendons. Camber, deflection, and crack control. Precast concrete concepts.

## CEE 450 Geomechanics (5 ECTS: 3-0-6)

## Prerequisite: CEE 251

Site exploration and in-situ testing: Standard Penetration Test (Spt), Cone Penetration Test (Cpt), Pressuremeter Test. Critical State Theory - advanced topics in soil behaviour. The finite element method in Geotechnical Engineering. Ground improvement: preloading, drains, compaction, soil replacement, stone columns, grouting. Reinforced earth retaining walls. Slope stabilization - anchors. Deep excavations Expansive Soils. Term project using finite element software.

## CEE 451 Engineering Geology (5 ECTS: 3-0-6)

Prerequisite: CEE 251 or CEE 253
Origin and composition of rocks. Geology of Cyprus. Geomorphology and Geological Structures. Engineering properties of rocks. Mechanical behaviour of rocks discontinuities. Rock Mass Classification Systems. Mechanical behaviour of rocks mass. Hoek \& Brown failure criterion. Rock slope stability - landslides. Rock mass permeability. Permeability field testing. The role of Geology in the design and construction of dams and tunnels.

CEE 470 Water Resource Management (5 ECTS: 3-0-6)
Prerequisites: CEE 370 and CEE 371
Water demand and supply. Distribution systems. Collection, transportation and storage of water resources. Pipe networks and pumps. Reservoirs and dams. Control of water resources by natural system functions, user actions, and influence of social, economic, and political institutions. Water resource policies. Case studies (e.g. flood/drought management).

CEE 475 Design of Hydraulic Systems (5 ECTS: 3-0-6)
Prerequisites: CEE 370 and CEE 371
Design of Water Supply and Sewage Systems: Drinking water quality. Design flow estimation. Population forecasting. Water sources. Water intakes. Water conveying and containment systems. Pump systems - operating points, similarity, cavitation. Reservoir balance. Design of water distribution networks. Appurtenances and special devices of networks. Waterhammer and other transient phenomena. Wastewater and stormwater collection systems - design flows, general layout, hydraulic computations. Pipe materials, quality issues. Design of Irrigation and Drainage Systems: Origin and quality of irrigation water. Soil properties, soil moisture. Flow equation, infiltration. Plant water demands evapotranspiration, photosynthesis. Rainfall and water balance. Design flows. Distribution systems - surface irrigation, spraying, drip irrigation; general layout, hydraulic computations. Economic optimisation. Drainage and flood control.

## CEE 477 Coastal Engineering (5 ECTS: 3-0-6)

Prerequisites: CEE 370 and CEE 371
Hydrodynamic Processes in the Coastal and Nearshore Regions. Waves, Tides and Currents. Morphology and Modification of Shoreline. Protection and Restoration of Coastal Areas. Design of Coastal and Maritime Structures. Coastal and Maritime Structures Management.

CEE 480 Wastewater Management (5 ECTS: 3-0-6)
Constituents in wastewater, analysis and selection of wastewater flow rates and constituent loadings, process analysis, physical-chemical-biological unit operations, fundamentals of biological treatment, advanced treatment methods.

## CEE 483 Transport Processes in Environmental

 Engineering (5 ECTS: 3-0-6)
## Prerequisite: CEE 270

Fundamentals of Pollutant Transport Mechanisms (advection, diffusion, dispersion) related to air, water and
ground media. Gaussian Plume Dispersion Models, Lagrangian diffusion, Taylor's dispersion. Air/Water Quality assessment; environmental design and Mitigation Strategies. Heat transfer and energy considerations for building design.

## CEE 492 Independent Study (5 ECTS: 0-0-10)

Prerequisite: academic advisor's approval
Individual study, research or laboratory investigation under faculty supervision.

CEE 493 Independent Study (5 ECTS: 0-0-10)
Prerequisite: academic advisor's approval Individual study, research or laboratory investigations under faculty supervision.

CEE 494 Advanced Topics in Environmental Engineering (5 ECTS: 3-0-6)
Advanced and contemporary topics of special interest in Environmental Engineering (Fall Semester).

## CEE 495 Advanced Topics in Environmental Engineering (5 ECTS: 3-0-6)

Advanced and contemporary topics of special interest in Environmental Engineering (Spring Semester).

CEE 496 Advanced Topics in Civil Engineering ( 5 ECTS: 3-0-6)

Advanced and contemporary topics of special interest in Civil Engineering (Fall Semester).

CEE 497 Biological Systems Engineering (5 ECTS: 3-0-6)
Use of microbial activity for solving environmental issues and biotechnological applications for production of biomaterials, bio-energy and bio-degradation of wastewater and contaminated areas. The course aims at familiarizing students with the principles of cell biology, microorganisms and engineering.

## Elective Courses for the Department of Architecture

CEE 130 Structures I (5 ECTS: 3-0-6)
Introduction to the Principles of Statics. Force Equilibrium Plane simple structures, synthesis, support, reactions, compound structures. Statically determined trusses: method of joints, method of sections, internal forces and moments in slender beams and statically determined systems. Longitudinal load, shear and bending moment diagrams. Analysis of indeterminate beam systems. Equilibrium and the principle of virtual work, the kinematical method. Deformations.

CEE 133 Structures II (5 ECTS: 3-0-6)

## Prerequisite: CEE 130

Methods of analysis of Simple Indeterminate Systems: trusses, frames, parabolic arch, flexible suspension cables. Strength of materials (masonry, reinforced concrete, steel, timber) and preliminary stress design. Basic terms of elasticity, uniform distributed stresses for tension, compression, bending, shear and torsion, diagrams of internal forces and design factors.

## CEE 241 Reinforced Concrete Structures (5 ECTS: 3-0-6)

## Prerequisite: CEE 133

Introduction to Reinforced Concrete Structures. Basic terms in reinforced concrete, mechanic properties. Design of storey slabs, beams, columns and walls, construction requirements. Prestressed concrete, foundations. Term project on the design of a Reinforced Concrete Structure, integrated with the course ARH 201.

## CEE 345 Steel Structures (5 ECTS: 3-0-6)

Prerequisite: CEE 133
Introduction to Steel Structures. Structural System Classification and Design of Construction Elements and Connections. Fire protection. Steel-concrete Composite Structures, storey slabs. Design exercises involving Steel Structures.

## ANALYTICAL PROGRAMME OF STUDIES

|  | ECTS |
| :---: | :---: |
| 1 st YEAR |  |
| 1st Semester |  |
| CEE 101 Engineering Mechanics | 5 |
| MAS 025 Mathematics for Engineers I | 5 |
| MAS 029 Elements for Linear Algebra | 5 |
| PHY 134 Physics for Engineers | 5 |
| CS 033 Introduction to Programming or Electrical and Computer Engineers | 5 |
| LAN 100 General Advanced English | 5 |
| TOTAL | 30 |
| 2nd Semester |  |
| ARH 123 Computer-aided Technical Drawing | 5 |
| CEE 113 Land Surveying | 5 |
| CEE 121 Structural Analysis I | 5 |
| MAS 026 Mathematics for Engineers II | 5 |
| LAN 104 English for Technical Purposes | 5 |
| MAS 030 Introduction to Probabilities and Statistics | 5 |
| TOTAL | 30 |
| YEAR TOTAL | 60 |
| 2nd YEAR |  |
| 3rd Semester |  |
| CEE 220 Structural Analysis II | 5 |
| CEE 230 Strength of Materials | 5 |
| CEE 232 Strength of Materials - Laboratory | 2.5 |
| CEE 270 Fluid Mechanics for CEE | 5 |
| CEE 272 Fluid Mechanics Laboratory | 2.5 |
| MAS 027 Mathematics for Engineers III | 5 |
| Elective Course | 5 |
| TOTAL | 30 |
| 4th Semester |  |
| CEE 201 Numerical Methods in Engineering | 5 |
| CEE 221 Matrix Structural Analysis | 5 |
| CEE 231 Construction Materials | 5 |
| CEE 233 Construction Materials - Laboratory | 2.5 |
| CEE 251 Soil Mechanics | 5 |
| CEE 253 Soil Mechanics - Laboratory | 2.5 |
| Elective Course | 5 |
| TOTAL | 30 |
| YEAR TOTAL | 60 |

## ELECTIVE COURSES

|  |  | ECTS |
| :---: | :---: | :---: |
| Fall Semester |  |  |
| CEE 401 | Software Development for Engineering Applications | 5 |
| CEE 432 | Masonry Building Materials | 5 |
| CEE 442 | Prestressed Concrete | 5 |
| CEE 451 | Engineering Geology | 5 |
| CEE 470 | Water Resource Management | 5 |
| CEE 477 | Coastal Engineering | 5 |
| CEE 492 | Independent Study | 5 |
| CEE 494 | Advanced Topics in Environmental Engineering | 5 |
| CEE 497 | Biological Systems Engineering | 5 |

## Spring Semester

CEE 411 Construction Management II 5
CEE 441 Design of Steel Structures II 5
CEE 450 Geomechanics 5
CEE 475 Design of Hydraulic Systems 5
CEE 480 Wastewater Management 5
CEE 483 Transport Processes in Environmental Engineering 5
CEE 493 Independent Study 5
CEE 495 Advanced Topics in Environmental Engineering

www.ucy.ac.cy/ece/en

## DEPARTMENT OF ELECTRICAL <br> AND COMPUTER ENGINEERING

Electrical and Computer Engineering (ECE) is a key discipline, at the heart of the technology frontier. It concerns the design and analysis of electrical, magnetic, and optical devices, and the processing, control, and transmission of information and energy. The tools used in electrical and computer engineering include electrical, electromagnetic, and optical phenomena, systems theory, and computational hardware and software.

## CHAIRPERSON

Chrysostomos Nicopoulos
VICE-CHAIRPERSON
Charalambos A. Charalambous

## PROFESSORS

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Charalambos D. Charalambous
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Stavros lezekiel
Christos Panayiotou
Constantinos Pitris
Marios Polycarpou

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ASSISTANT PROFESSORS
Marcos Antoniades
Themistoklis Charalambous
Mathaios Panteli
Stelios Timotheou
LECTURER
Chrysafis Andreou

## INTRODUCTION

Electrical Engineering is a broad field that covers many diverse areas of study, such as microelectronics, digital communications, wireless systems, photonic systems, power systems, signal processing, computer technology, microprocessors, automation and feedback control, neural networks, and electronic devices' design and fabrication. Computer Engineering is the science and technology of design, implementation, and maintenance of the hardware and software components of modern computing systems and computer-controlled equipment. Computer engineers are solidly grounded in the theories and principles of computing, mathematics and engineering, and apply these theoretical principles to the design of hardware, software, networks, and computerized equipment and instruments, to solve technical problems in diverse application domains. The Faculty of Electrical and Computer Engineering develops synergies with disciplines outside Engineering; for example, with medicine and the life sciences which can lead to education and research in Biomedical Engineering.

## CAREER OPPORTUNITIES

There are many job opportunities for electrical and computer engineers and it is anticipated that there will be even more in the future, as technology pushes into new frontiers. Electrical and computer engineers work in industry, private practice, government agencies, and education and research organizations, performing functions that include research and development, planning, designing, operating and maintaining a variety of electrical and computing apparatus and systems. They also test equipment, solve operating problems and estimate the time and cost of projects. Besides manufacturing, research, development and design, many are employed in administration and management or technical sales.

## UNDERGRADUATE PROGRAMMES OF STUDIES

The mission of the Department of Electrical and Computer Engineering is to provide a comprehensive, state-of-the-art education that prepares students for success in engineering practice and/or advanced studies. The Department's graduates command the fundamentals of Electrical and Computer Engineering and acquire in-depth knowledge in one or more specialization areas. The Department's objectives are met through programmes of study that consist of basic mathematics and science courses, core courses that promote ECE fundamentals and technical electives that provide in-depth specialization in various technological areas. The programmes encourage a balanced mixture of theoretical and experimental work.

The Department offers the following two undergraduate degrees:

- Bachelor of Science (B.Sc.) in Electrical Engineering
- Bachelor of Science (B.Sc.) in Computer Engineering

The programme of studies is based on the European Credit Transfer and Accumulation System (ECTS). This system facilitates pan-European recognition of programmes of study and qualifications, and is a tool for establishing and securing transparency, as well as a means for building communication and cooperation among institutions, while simultaneously broadening the educational choices of students. Roughly, an ECTS unit corresponds to a student workload of 25-30 hours (including lectures, tutorials, labs, projects, etc.). In order to obtain a B.Sc. Degree in Electrical or Computer Engineering, at least 240 ECTS are required. These are distributed primarily among basic science courses, ECE core and elective courses, and a senior design project, but also include some language and free elective courses, as shown in the tables that follow. Required science courses include mathematics, physics, computer science, and management. General free elective courses must be taken from at least two different faculties of the University of Cyprus and must not be related to the student's programme of study.

Students are admitted to either the Electrical Engineering Degree Programme, or the Computer Engineering Degree Programme. The first and second years of the Electrical Engineering (EE) and Computer Engineering (CE) programmes are closely related, having all but one course in common. During the first two years, the programme of study is structured to provide students with a rigorous body of knowledge in mathematics, physics, and electrical engineering fundamentals, all essential to achieve a deep understanding of more advanced electrical engineering topics. In the third year, depending on their degree programme, students receive training in more advanced but fundamental topics in Electrical or Computer Engineering. In the fourth year, students have the flexibility to select elective courses from a variety of specialization areas, according to their individual interests. In addition, the fourth year also includes a capstone design project (senior design thesis) or a capstone design course, which students select from a variety of categories and undertake with the guidance of a faculty member. These courses are available to students in their final year of study (eligible students must have accumulated at least 168 ECTS). Students, who opt to take the Capstone Design Project as an alternative to the Capstone Design Course, must have a GPA above 7.5; alternatively, they must find a faculty member who will work with them and secure approval from the Departmental Council. The capstone design project/course is intended to prepare students to address challenging engineering issues; it requires integration of electrical and computer engineering knowledge, accumulated over the previous years of study.

## ECE Core Electives

Students in their third year are required to take (depending on their programme of study) at least one or two restricted ECE Core Elective Courses (6 ECTS each). These courses are chosen from a list of predetermined ECE Core Electives, in consultation with their academic advisor; their purpose is to introduce and solidify the fundamentals of Electrical and Computer Engineering, and to prepare students for their specific study direction (chosen in the fourth year).

EE Students must take at least one core elective course from the following course list:

- ECE 307 Digital Integrated Circuits
- ECE 318 Programming Principles for Engineers
- ECE 325 Iterative Methods
- ECE 330 Power Systems \& Materials Fundamentals
- ECE 333 Photonics
- ECE 360 Computer Networks
- ECE 370 Introduction to Biomedical Engineering

CE Students must take at least two core elective courses from the following course list:

- ECE 307 Digital Integrated Circuits
- ECE 318 Programming Principles for Engineers
- ECE 326 Dynamic Systems and Control
- ECE 359 Introduction to Communication Systems
- ECE 370 Introduction to Biomedical Engineering


## AREAS OF CONCENTRATION

In the fourth year of the Electrical and Computer Engineering curriculum, students are required to select one area (or more) of concentration, according to their academic interests. Specifically, students are required to take six Technical Elective Courses (36 ECTS), including three courses from the same area of concentration.

The areas of concentration for Electrical Engineering are the following:

- Communication Systems and Networks
- Biomedical Engineering
- Electric Energy Systems
- Intelligent Systems and Control
- Waves, Antennas and Optics

The areas of concentration for Computer Engineering are the following:

- Computer Hardware and Embedded Systems
- Intelligent Systems and Robotics
- Computer Networks
- Biomedical Engineering


## COURSE DESCRIPTIONS

## Compulsory Courses

ECE 100 Introduction to Design and Engineering (5 ECTS)
This course covers the following topics: engineering basics and design principles, various ECE programmes of study, problems that electrical and computer engineers are asked to solve, and the methods used to solve engineering problems. The course also provides information on engineering ethics, social implications, intellectual property, project management, and teamwork. Basic electronics and computing skills, as well as library skills and website design are taught.

## ECE 101 Introduction to Design and Engineering Laboratory (2 ECTS)

This is a laboratory course in which students learn engineering basics and design principles, project and time management, and teamwork. Basic electronics, technology and computing skills are taught. Students are asked to solve an engineering problem, usually by designing and implementing a system both in hardware and software. This system must meet given specifications and must perform a specified task. The engineering problem usually involves a robot design, implementation and programming, and a robotics competition.

ECE 102 Electrical Circuits and Networks (7 ECTS)
Circuit models: KCL and KVL, mesh current and voltage analysis. Thévenin and Norton equivalent circuits. Network theorems: one-port and two-port networks, sinusoidal steady-state analysis and transient analysis of first-and second-order networks, response to exponential driving functions, power considerations.

## ECE 105 Engineering Analysis and Modeling (7 ECTS)

This course provides the mathematical foundations for modeling and analysis of engineering systems. Topics include: mathematical modeling, transformations, approximation, utilization of complex numbers for the analysis of electric circuits, fault analysis and errors, and basic principles for statistical analysis. There is also an introduction to the principles of programming (MATLAB) and applications.

## ECE 202 Electronic Device Principles and Circuit Modeling (5 ECTS)

## Prerequisite: ECE 102

Semiconductor conduction, energy bands and carrier statistics, p-n junction diodes, LEDs, photodiodes, MOSFET structure and principles of operation, bipolar junction transistor structure and principles of operation. Large and small signal models, low-frequency and high-frequency device models. Integrated device fabrication.

## ECE 203 Circuits and Measurements Laboratory (5 ECTS)

## Prerequisite: ECE 102

Introduction to experimental electrical measurements and circuits. Use of common instruments for the generation and measurement of current, voltage, resistance, capacitance, and inductance. Familiarization with the measurement practices in circuits and application of basic circuit theorems (Ohm, Kirchoff, and Dividers).
Understanding the source of errors and noise in electrical measurements and the difference between theoretical values and experimental measurements. Experimental application of alternating current (AC) circuit theory ( RC and RLC). Measurement of maximum power transfer and frequency response.

## ECE 205 Electronic Devices and Circuits I (5 ECTS)

## Prerequisite: ECE 102

Semiconductor materials: p - n junction, diode circuits, DC and AC diode circuit analysis. Diode circuits, bipolar junction transistor, basic BJT amplifiers. Field effect transistors (FET): MOSFET DC analysis, MOSFET applications, junction field effect transistor. Basic FET amplifier: MOSFET amplifier, common source amplifier, source follower amplifier, amplifiers with MOSFET load devices, multistage amplifiers, basic JFET amplifiers. FET digital circuits: NMOS inverters and logic circuits, CMOS inverters and logic circuits, transmission gates, shift registers and flip-flops. Bipolar digital circuits: Diodetransistor and transistor-transistor logic, Schottky transistor-transistor logic.

## ECE 210 Digital Logic Design (5 ECTS)

Digital systems and information representation. Arithmetic operations, decimal and alphanumeric codes. Binary logic, Boolean algebra (identities, functions and manipulation), standard forms, simplification. Logic gates, switch-level and CMOS implementation, integrated circuits. Combinational logic design: circuits (gate level), design hierarchy and procedures, Computer-aided design. Two-level and multilevel implementations. Arithmetic (add, subtract, multiply) and other popular modules (multiplexers, encoders, decoders). Sequential logic design: latches, flip-flops, state machines design and minimization (Mealy and Moore models), design problems. Registers and counters. Memory and programmable logic design. Language-directed combinational and sequential design (VHDL). Introduction to register-level design: data path and control, basic computer architecture.

## ECE 211 Digital Systems Laboratory (3 ECTS)

Co-requisite: ECE 210
The laboratory experiments involve the design and testing of digital systems, using small- and medium-scale integrated circuits. Students are exposed to design with
both discrete components and CPLD/FPGA-based system boards. Computer-aided design tools and hardware description programming language (VHDL) are used extensively for design, simulation, and verification.

## ECE 212 Computer Organization and Microprocessors (5 ECTS)

Prerequisites: ECE 210, ECE 211 and CS 034
Introductory course on modern computer architecture, focusing on the visible programmer aspects of the machine and their corresponding implementation. Topics include: data representation in digital computers, the stored program concept, addressing modes, instruction formats and instruction sets, data path and control unit design, hardwired and micro-programmed control, memory components and the memory hierarchy, computer structure, central processing unit, machine language, VHDL programming, introduction to microprocessors and their uses, the special features of microprocessors (stack, interrupts, input ports, output ports, and displays), performance analysis and comparison, benchmarking and performance metrics.

## ECE 213 Computer Organization and Microprocessors

 Laboratory (3 ECTS)
## Co-requisite: ECE 212

Hands-on experience with data representation in digital computers, the stored program concept, addressing modes, instruction formats and instruction sets, data path and control unit design, hardwired and micro-programmed control, memory components and the memory hierarchy, computer structure, central processing unit, machine language, VHDL programming.

## ECE 220 Signals and Systems I (6 ECTS)

## Prerequisite: MAS 026

Continuous and discrete-time signals and systems, ideal signals in continuous and discrete-time, system properties, linear time-invariant systems, impulse response, convolution in continuous and discrete time, description of systems with linear differential equations, eigen-functions of linear, time-invariant systems, Fourier series for periodic continuous-time signals, Fourier transforms for periodic and aperiodic continuous time signals, analysis of lineartime invariant systems with the Fourier transform, frequency response and continuous-time filters, Bode diagrams, Laplace transform.

## ECE 221 Signals and Systems for Computer Engineers

 (6 ECTS)
## Prerequisite: MAS 026

Basic continuous and discrete-time signals in linear vector spaces, impulse functions, basic properties of discrete and continuous linear time-invariant (LTI) systems, difference and differential LTI systems. Analysis of LTI single-loop
feedback systems via transform techniques. Discrete-time Fourier series, discrete-time Fourier transform, and Z transform. Time and frequency analysis of discrete-time LTI systems, sampling systems, application of continuous and discrete-time signal theory to communication systems, digital control systems, and signal processing.

## ECE 224 Introduction to Random Signals and Systems

 (5 ECTS)Basic probabilistic models. Conditional probability and Bayes' rule. Random variables and vectors, distribution and density functions, expectation and characteristic functions. Statistical independence, law of large numbers, centrallimit theorem. Introduction to random processes; second-order processes. Linear systems subject to random processes' inputs; Power spectral density.

## ECE 305 Electronic Devices and Circuits II (5 ECTS)

## Prerequisite: ECE 205

Amplifier analysis and frequency response. Frequency response of transistor amplifiers, bipolar transistors, FET and high frequency response of amplifier circuits. Basic electronic circuits: power transistor, classes of transistors and push-pull transistors. Basic operational amplifier circuits: Ideal op-amp, inverter and non-inverting amplifiers, summing amplifier, op-amp applications and circuit design. Current sources and circuits with active loads, small signal analysis. Differential and multistage amplifiers: Basic BJT and FET differential pair, differential amplifier with active load, BiCMOS circuits, gain stage and simple output stage, differential amplifier frequency response. Op-amp circuits: Bipolar, BiCMOS, JFET, CMOS, voltage regulators, etc.

## ECE 306 Electronic Devices and Circuits Laboratory (5 ECTS)

Prerequisite: ECE 305
Laboratory experiments involving basic diode characteristics, analysis and design of electronic circuits, differential amplifiers, power amplifiers, feedback amplifiers and BIPOLAR digital circuits.

## ECE 311 Discrete Analysis and Structures (6 ECTS)

Function and set operations, sequences and summations, proportional logic, predicate logic, rules of inference, methods of proof, principle of induction, relations, graphs, graph algorithms, trees, combinations, recursion, recurrence relations.

## ECE 312 Computer Architecture (5 ECTS)

## Prerequisite: ECE 212

This course is a continuation of the architectural concepts presented in ECE 212. Topics include: high-performance processor design (data path and control), pipelining (data path, control, hazards and exceptions, performance),
memory hierarchy (caches, virtual memory), interfacing processors and peripherals (memory, I/O, bus protocols), parallel processors, shared memory multiprocessors and coherence protocols.

## ECE 313 Engineering of Operating Systems (5 ECTS)

## Prerequisite: CS 035

An introduction to modern operating systems, and examination of the services and abstractions commonly provided by operating systems, followed by study of the underlying mechanisms used to implement them.

Topics include: process management, scheduling, and synchronization. Inter-process communication. Memory management (basic, virtual, page replacement algorithms). Input/output and file systems, deadlocks, Unix/Linux operating system, distributed operating systems and distributed file systems. Programming assignments and case studies are used to illustrate the fundamental concepts.

## ECE 314 Computer Architecture Laboratory (3 ECTS)

Prerequisites: ECE 210, ECE 211, ECE 212 and ECE 213 Co-requisite: ECE 312
This lab provides a hands-on introduction to the architecture and micro-architecture of modern microprocessors. Through implementation of a 5 -stage RISC processor using HDL language and functional simulation, students apply architectural and micro-architectural fundamentals to understand the impact on the performance of the microprocessor. Students analyse and evaluate the performance of basic architectural principles employed in the design of RISC Processors, and evaluate how instruction level parallelism is applied in a design laboratory.

## ECE 316 Operating Systems and Networks Laboratory

 (3 ECTS)Prerequisites: CS 034, CS 035
Co-requisites: $E C E 313, E C E 360$
This course consists of the design and commission of large computer systems, including hardware and software systems. Ethical, social, economic, safety and legal issues are covered. Upon completion, students are fluent in the following tasks: project management, code modularity, costing, marketing, control, standards, code verification and testing, using CASE tools and debugging.

## ECE 317 Engineering of Computing (6 ECTS)

## Prerequisite: CS 035

This course consists of a sequence of lab assignments involving common problems in data networks and operating systems, socket programming, queuing theory modeling, thread migration techniques, load balancing and scheduling algorithms, resource allocation and task assignment problems, and common data handling and file
sharing policies including network file sharing. The course integrates practical problems from both operating systems and data networks into a laboratory class, thus offering students a practical and hands-on approach for learning the principles of modern operating systems and networks.

## ECE 320 Signals and Systems II (6 ECTS)

## Prerequisite: ECE 220

Analysis of LTI single-loop feedback systems via transform techniques, and discrete-time Fourier series, discrete-time Fourier transform, and $Z$ transform. Time and frequency analysis of discrete-time LTI systems, sampling systems, application of continuous and discrete-time signal theory to communication systems, digital control systems, and signal processing.

## ECE 325 Iterative Methods (6 ECTS)

## Prerequisite: CS 035

The course covers basic principles of optimization and focuses on iterative algorithms for solving engineering problems. Topics covered include matrices and matrix operations, system dynamics and difference equations, fast Fourier transforms (FFT) and discrete Fourier transforms (DFT), linear programming, network optimization, search algorithms, gradient-based techniques, and dynamic programming.

## ECE 326 Dynamic Systems and Control (6 ECTS)

Prerequisite: ECE 220 (EE) or ECE 221 (CE)
Introduction to the concepts of feedback, open loop and closed loop. Mathematical modeling of engineering systems and nonlinear dynamical control systems. General differential equations and state variables, linearization. State descriptions and transfer function descriptions.
Linear state space systems. Zero-input and zero-state solutions, stability, observability, controllability. Analog realizations of general linear differential equations. Performance limitations. Open-loop, feed-forward, closedloop configurations. Performance specifications. The Nyquist criterion, stability margins, unstructured uncertainty and robust stability. Classical design. Systems with delay. Pole placement.

ECE 327 Introduction to Control Systems Laboratory (2 ECTS)

## Co-requisite: ECE 326

The course complements course ECE 326, Dynamic Systems and Control. It provides students with practical experience in applying theory and methodologies to the analysis and design of control systems for specific engineering problems. The course comprises a series of laboratory exercises targeting system modeling, experimental system identification/model validation and simulation of the dynamic behaviour of systems using
software tools. It focuses on the design of control systems to meet prescribed specifications, as well as on examination of the simulated behaviour, followed by hardware implementation and evaluation of the actual control performance.

## ECE 331 Electromagnetic Fields (6 ECTS)

## Prerequisite: MAS 029

Maxwell's and wave equations, electrostatics, magnetostatics. Transmission lines. Time and space dependence of signals, line parameters, input impedance, reflection coefficient, standing-wave ratio, transient behaviour. Impedance matching; Transformers, stubs, analysis using the Smith chart.

## ECE 340 Power Engineering (6 ECTS)

Prerequisite: ECE 102
Power system components. Magnetic circuits, inductors, transformers and their equivalent circuits. Generation, transmission and utilization of electric power. 3-phase AC and DC systems. Fundamentals of electromechanical energy conversion. Power semiconductors: basic devices and circuit applications. DC/DC converters, buck, boost, buck-boost and their derivatives, basic operation and design criteria. AC circuits: SCR phase control, inverters, uninterruptable power supplies (UPS).

## ECE 341 Electric Machines Laboratory (2 ECTS)

## Co-requisite: ECE 340

In-depth analysis of the operation and the characteristics of transformers, DC machines and single-phase and threephase AC machines. DC machine experiments include shunt, series, and compound wound machines, both in the motor and generator modes. AC machine experiments include squirrel cage and slip ring induction motors, and salient pole and round rotor synchronous generators/motors. The transformer experiments concentrate on no load and on load characteristics, and short circuit and open circuit tests.

## ECE 358 Telecommunications Laboratory (2 ECTS)

Co-requisite: ECE 359
This course is a series of labs on analog, digital, and fiberoptic communications. The course includes analog communications experiments on amplitude, frequency and phase modulation and detection. It also covers digital communications experiments on PAM and PCM signal generation and demodulation. Delta modulation, channel bandwidth and noise, encoding and decoding, ASK/PSK/FSK signal generation and detection, and the effect of noise on ASK, PSK and FSK signals. Experiments on losses, dispersion, and optical power budget for fiber-optic communication systems are also included.

## ECE 359 Introduction to Communication Systems (6 ECTS)

## Prerequisite: ECE 220 (EE) or ECE 221 (CE)

Analysis and design of analog communication systems: AM and FM modulation and demodulation, noise. Digital communication systems: sampling, quantization, encoding, digital modulation and detection techniques. Multiplexing. Applications. Examples, telephone systems, cable TV systems and broadcasting systems.Intersymbol interference in digital communication, channel equalization and synchronization.

## ECE 360 Computer Networks (6 ECTS)

Computer network design goals. Circuit switched, packet switched and virtual circuit switched networks. The course introduces the layering approach and the OSI layer model. It covers issues of the physical, data link, and network layers and introduces the Internet Protocol (IP). Reliable end-toend communication and the transport layer. Introduction to the UDP and TCP protocols.

## ECE 401/402 Capstone Design Project I and II (7 ECTS each)

Students enroll in this capstone design project (senior thesis design) in their final year, under the guidance and supervision of a faculty member. The final thesis project teaches students how to approach technological problems that require integrated knowledge and application of engineering principles learned in their course of study. Students will choose a thesis topic on either Electrical or Computer Engineering from a wide variety of projects, in consultation with the supervising faculty member.

## ECE 403/404 Capstone Design Course I and II ( 7 ECTS each)

This course spans two semesters and focuses on the principles of project planning, organization, implementation, verification, and evaluation. Through the implementation of a capstone project, students apply the principles and practices they have learned throughout their studies. The course encapsulates an array of learning outcomes related to project management, such as: capturing requirements and specifications, strategic decision making and planning, implementation methodologies and models, evaluation strategies, testing and verification methodologies, and other concepts. Furthermore, students learn principles of time management and organization, independent study techniques and collaboration and cooperation strategies through teamwork. Through project deliverables, students develop project report writing strategies, exploitation and dissemination of results, presentation and outreach activities for future exploitation. The course offers students a selection of capstone projects, which are given annually in collaboration with the Departmental Council and the course instructor(s), and cover an array of topics in Electrical and Computer Engineering.

## Elective Courses for other Departments

EECE 001 Health and Technology (5 ECTS)
Medicine has evolved from an inaccurate art to a science that saves lives every day. This course investigates the principles of some of the most important technological advancements in medicine and analyses the financial and ethical implications of their application. Students learn about the scientific and technological basis of the operation of modern medical instrumentation, as well as its inception, socio-economic impact, and possible future evolution. This course is designed for students of all majors and does not require a science or engineering background.

## ANALYTICAL PROGRAMME OF STUDIES FOR ELECTRICAL ENGINEERING

| ECTS |  |  |
| :---: | :---: | :---: |
| 1st YEAR 1st Semester |  |  |
|  |  |  |
| PHY 131 General Physics I: Mechanics and Waves and Thermodynamics |  |  |
| MAS 025 | Mathematics for Engineers I | 5 |
| ECE 100 In | Introduction to Design and Engineering | 5 |
| ECE 101 | Introduction to Design and Engineering Laboratory | 2 |
| ECE 105 E | Engineering Analysis and Modeling | 7 |
| LAN 100 | General Advanced English | 5 |
| TOTAL |  | 30 |
| 2nd Semester |  |  |
| PHY 132 General Physics II: Electricity and Electromagnetic and Optics |  |  |
| MAS 026 N | Mathematics for Engineers II | 5 |
| CS 034 In | Introduction to Programming Principles for Electrical and Computer Engineers | 7 |
| ECE 102 E | Electrical Circuits and Networks | 7 |
| LAN 104 E | English for Technical Purposes | 5 |
| TOTAL |  | 30 |
| YEAR TOTAL | TAL | 60 |
| 2nd YEAR |  |  |
| 3rd Semester |  |  |
| MAS 029 E | Elements of Linear Algebra | 5 |
| CS 035 D | Data Structures and Algorithms for Electrical and Computer Engineers | 7 |
| ECE 202 E | Electronic Device Principles and Circuit Modeling | 5 |
| ECE 203 | Circuits and Measurements Laboratory | 5 |
| ECE 210 Di | Digital Logic Design | 5 |
| ECE 211 D | Digital Systems Laboratory | 3 |
| TOTAL |  | 30 |
| 4th Semester |  |  |
| MAS 027 N | Mathematics for Engineers III | 5 |
| ECE 220 S | Signals and Systems I | 6 |
| ECE 205 E | Electronic Devices and Circuits I | 5 |
| ECE 212 C | Computer Organization and Microprocessors | 5 |
| ECE 213 | Computer Organization and Microprocessors Laboratory | 3 |
| ECE 224 In | Introduction to Random Signals and Systems | 5 |
| TOTAL |  | 29 |
| YEAR TOTAL | TAL | 59 |

1st YEAR
1st Semester
PHY 131 General Physics I: Mechanics and Waves and Thermodynamics
MAS 025 Mathematics for Engineers I
ECE 100 Introduction to Design and Engineering Laboratory
ECE 105 Engineering Analysis and Modeling
LAN 100 General Advanced English 5

TOTAL

2nd Semester
PHY 132 General Physics II: Electricity and Electromagnetic
MAS 026 Mathematics for Engineers II 5
CS 034 Introduction to Programming Principles for Electrical and Computer Engineers
EEF 102 Electrical Circuits and Network
LAN 104 English for Technical Purposes
TOTAL 30
YEAR TOTAL

## 0

2nd YEAR
3rd Semester
MAS 029 Elements of Linear Algebra

ECE 203 Circuits and Measurements Laboratory
Digital Logic Design
ECE 211 Digital Systems Laboratory
TOTAL
4th Semester
MAS 027 Mathematics for Engineers III
ECE 220 Signals and Systems I 6
205 Electronic Devices and Circuits

TOTAL29
YEAR TOTAL ..... 59
ECTS
3rd YEAR
5th Semester
ECE 305 Electronic Devices and Circuits II ..... 5
ECE 320 Signals and Systems II ..... 6
ECE 326 Dynamic Systems and Control ..... 6
ECE 327 Introduction to Control Systems Laboratory ..... 2
ECE 331 Electromagnetic Fields ..... 6
General Free Elective Course I ..... 5
TOTAL ..... 30
6th Semester
ECE 306 Electronic Devices and Circuits Laboratory ..... 5
ECE 340 Power Engineering ..... 6
ECE 341 or ECE 358 Electrical Engineering Laboratory Elective (Electric Machines or Telecommunications Laboratory ..... 2
ECE 359 Introduction to Communication Systems ..... 6
ECE 3XX ECE Core Elective I ..... 6
General Free Elective Course II ..... 5
TOTAL ..... 30
YEAR TOTAL ..... 60
4th YEAR
7th Semester
ECE 401/403 Capstone Design Project/Course I ..... 7
ECE 4XX ECE Technical Elective Course ..... 6
ECE 4XX ECE Technical Elective Course ..... 6
ECE 4XX ECE Technical Elective Course ..... 6
General Free Elective Course III ..... 5
TOTAL ..... 30
8th Semester
ECE 402/404 Capstone Design Project/Course II ..... 7
PBA 468 Entrepreneurship and Innovation ..... 7
ECE 4XX ECE Technical Elective Course ..... 6
ECE 4XX ECE Technical Elective Course ..... 6
ECE 4XX ECE Technical Elective Course ..... 6
TOTAL ..... 32
YEAR TOTAL ..... 62
GRAND TOTAL ..... 241

## ANALYTICAL PROGRAMME OF STUDIES FOR COMPUTER ENGINEERING

|  | ECTS |
| :---: | :---: |
| 1st YEAR |  |
| 1st Semester |  |
| PHY 131 General Physics I | 6 |
| MAS 025 Mathematics for Engineers I | 5 |
| ECE 100 Introduction to Design and Engineering | 5 |
| ECE 101 Introduction to Design and Engineering Laboratory | ry 2 |
| ECE 105 Engineering Analysis and Modeling | 7 |
| LAN 100 General Advanced English | 5 |
| TOTAL | 30 |
| 2nd Semester |  |
| PHY 132 General Physics II | 6 |
| MAS 026 Mathematics for Engineers II | 5 |
| CS 034 Programming Principles I | 7 |
| ECE 102 Electrical Circuits and Networks | 7 |
| LAN 104 English for Technical Purposes | 5 |
| TOTAL | 30 |
| YEAR TOTAL | 60 |
| 2nd YEAR <br> 3rd Semester |  |
|  |  |
| MAS 029 Elements of Linear Algebra | 5 |
| CS 035 Data Structures and Algorithms | 7 |
| ECE 202 Electronic Device Principles and Circuit Modeling | 5 |
| ECE 203 Circuits and Measurements Laboratory | 5 |
| ECE 210 Digital Logic Design | 5 |
| ECE 211 Digital Systems Laboratory | 3 |
| TOTAL | 30 |
| 4th Semester |  |
| MAS 027 Mathematics for Engineers III | 5 |
| ECE 221 Signals and Systems for Computer Engineers | 6 |
| ECE 205 Electronic Devices and Circuits I | 5 |
| ECE 212 Computer Organization and Microprocessors | 5 |
| ECE 213 Computer Organization and Microprocessors Laboratory | 3 |
| ECE 224 Introduction to Random Signals and Systems | 5 |
| TOTAL | 29 |
| YEAR TOTAL | 59 |

3rd YEAR
5th Semester
ECE 311 Discrete Analysis and Structures 6
ECE 312 Computer Architecture 5
ECE 314 Computer Architecture Laboratory 3
ECE 325 Iterative Methods 6
ECE 3XX ECE Core Elective I 6
General Free Elective Course I 5
TOTAL 31
6th Semester
ECE 313 Engineering of Operating Systems 5
ECE 316 Operating Systems and
Networks Laboratory
ECE 317 Engineering of Computing 6
ECE 360 Computer Networks 6
ECE 3XX ECE Core Elective II 6
General Free Elective Course II 5
TOTAL 31
YEAR TOTAL 62
4th YEAR
7th Semester
ECE 401/403 Capstone Design Project/Course I 7
ECE 4XX ECE Technical Elective Course 6
ECE 4XX ECE Technical Elective Course 6
ECE 4XX ECE Technical Elective Course 6
General Free Elective Course III 5
TOTAL 30
8th Semester
ECE 402/404 Capstone Design Project/Course II 7
PBA 468 Entrepreneurship and Innovation 7
ECE 4XX ECE Technical Elective Course 6
ECE 4XX ECE Technical Elective Course 6
ECE 4XX ECE Technical Elective Course 6
TOTAL 32
YEAR TOTAL 62
GRAND TOTAL 243
59

## TECHNICAL ELECTIVE COURSES (6 ECTS each)

## Electrical Engineering Direction of Study

Students following the Electrical Engineering Programme must take 6 Elective Courses ( 36 ECTS units) from the following list of Technical Elective Courses, of which three courses must be chosen from one of the following areas of concentration:

## Communication Systems and Networks

ECE 360 Computer Networks
ECE 417 Distributed Systems
ECE 453 Wireless Telecommunication Networks
ECE 455 Fiber Optic Communication Systems and Networks
ECE 457 Computer System and Network Security
ECE 464 Mobile Computing Systems
Biomedical Engineering
ECE 425 Introduction to Robotics
ECE 429 Digital Signal Processing
ECE 435 Optical Engineering and Photonics Laboratory
ECE 471 Neurophysiology and Senses
ECE 473 Instrumentation and Sensors
ECE 476 Biomedical Imaging
ECE 477 Biomedical Optics
ECE 478 Digital Image Processing
Electric Energy Systems
ECE 441 Electromechanical Energy Conversion
ECE 442 Power System Analysis
ECE 444 Power Electronics
ECE 445 Power Systems: Generation and Control
ECE 447 Renewable Sources of Energy: Photovoltaics
ECE 448 Advanced Electric Machines
Intelligent Systems and Control
ECE 421 Introduction to Computational Intelligence
ECE 424 Fault-Tolerant Systems
ECE 425 Introduction to Robotics
ECE 428 Control Systems Laboratory
ECE 429 Digital Signal Processing
ECE 478 Digital Image Processing
Waves, Antennas and Optics
ECE 435 Optical Engineering and Photonics Laboratory
ECE 437 Antennas
ECE 438 Microwave and Radio-Frequency Circuits
ECE 447 Renewable Sources of Energy: Photovoltaics
ECE 455 Fiber Optic Communication Systems and Networks

## Computer Engineering Direction of Study

Students following the Computer Engineering Programme must take 6 Elective Courses ( 36 ECTS units) from the following list of Technical Elective Courses, including three courses from one of the following areas of concentration:

## Computer Hardware and Embedded Systems

ECE 406 Digital VLSI Circuit Design
ECE 407 Computer Aided Design for VLSI
ECE 408 Digital Design with FPGA
ECE 409 Computer Architecture II
ECE 424 Fault-Tolerant Systems
Intelligent Systems and Robotics
ECE 421 Introduction to Computational Intelligence
ECE 424 Fault-Tolerant Systems
ECE 425 Introduction to Robotics
ECE 429 Digital Signal Processing
ECE 478 Digital Image Processing
ECE 480 Brain-Computer Interface

## Computer Networks

ECE 359 Introduction to Communication Systems
ECE 417 Distributed Systems
ECE 424 Fault-Tolerant Systems
ECE 453 Wireless Telecommunication Networks
ECE 455 Fiber Optic Communication Systems and Networks
ECE 457 Computer System and Network Security
ECE 464 Mobile Computing Systems
Biomedical Engineering
ECE 425 Introduction to Robotics
ECE 429 Digital Signal Processing
ECE 435 Optical Engineering and Photonics Laboratory
ECE 471 Neurophysiology and Senses
ECE 473 Instrumentation and Sensors
ECE 476 Biomedical Imaging
ECE 477 Biomedical Optics
ECE 478 Digital Image Processing

## FACULTY OF ENGINEERING


www.ucy.ac.cy/mme/en

## DEPARTMENT OF MECHANICAL AND MANUFACTURING ENGINEERING

Mechanical and Manufacturing Engineering is a key discipline, that impacts on nearly every aspect of daily life, and is at the core of all technological developments.

The Department of Mechanical and Manufacturing Engineering (MME) was founded in 2001 and is one of the four departments in the Faculty of Engineering at the University of Cyprus. The first undergraduate students were admitted in September 2003 and graduated in June 2007. The first graduate students were admitted in January 2005. More than 200 undergraduate students and 50 graduate students, at Master 's and Ph.D. level, are currently enrolled in the MME programmes. Every year about 60 new students are admitted to the undergraduate programme.

The Department consists of experienced and distinguished professors, with expertise in a wide range of research fields.

## CHAIRPERSON

Andreas Kyprianou
VICE-CHAIRPERSON
Claus G. Rebholz

## PROFESSORS

Ioannis Giapintzakis
Stavros Kassinos
Theodora V. Kyratsi

## ASSOCIATE PROFESSORS

Theodora Krasia-Christoforou
Dimokratis Grigoriadis
Andreas Kyprianou
Loucas S. Louca
Claus G. Rebholz
Triantafyllos Stylianopoulos
Matthew Zervos
ASSISTANT PROFESSORS
Eftychios Christoforou
Vasileios Vavourakis

## LECTURERS

Dennis Politis
Alexandros Syrakos
Dimitrios Tzeranis

## INTRODUCTION

The Department offers a four-year undergraduate degree programme, which is designed based on international standards, as well as the peculiarities of the country, and gives emphasis on cutting-edge technologies.

The Department's curriculum and teaching methodology offer students not only an excellent education, but also cultivates their entrepreneurial spirit. The Department aims at producing high qualified and confident graduates who will be able to promote innovative ideas and stimulate development of a new high-technology-based industry in Cyprus.

Research and innovation are encouraged in an environment that fosters cooperation among students, faculty, industry and research organizations.

The Department offers: B.Sc. in Mechanical and Manufacturing Engineering and Minor in Biomedical Engineering.

## MECHANICAL AND MANUFACTURING ENGINEERING

Course hours/credits at the University of Cyprus follow the European Credit Transfer and Accumulation System, ECTS. Therefore, a B.Sc. Degree in Mechanical and Manufacturing Engineering requires successful completion of a minimum of 240 ECTS, of which 15 ECTS must be earned for elective courses (not included in the student's specialization) from two different faculties of the University, and 10 ECTS should be earned for English language courses.

The programme is designed to produce highly qualified graduates with a strong background in the fundamentals of the field, societal sensitivity and the independence of thought required for a successful career in Mechanical and Manufacturing Engineering. The curriculum follows a deductive approach to learning, which stems from the fact that all physical phenomena important to Mechanical and Manufacturing Engineers are governed by a set of simple physical laws. To meet needs posed by society, a successful mechanical engineer is expected to use these laws in order to describe the problem of interest and then use his/her experience to devise a solution. The solution is most often obtained through a combination of analytical, computational, and experimental means. Therefore, the curriculum educates students in basic physics, while reinforcing their mathematical skills and their ability to use computations and experimentation in order to obtain solutions at the stage of design.

An important goal of the Department's educational system is to produce creative and entrepreneurial students, who will be willing to further develop their ideas into commercial products.

## FINAL YEAR PROJECT

This project is developed in the course of an entire year and is compulsory for all fourth-year Mechanical and Manufacturing Engineering students. The project may be a group or an individual one. The faculty members suggest interesting topics at the end of each semester and students, in consultation with their faculty advisors, select one of them. The purpose of this project is for students to solve an interesting engineering problem, with a combination of analytical, computational and / or experimental means.

## INTERNSHIP

The MME Department Internship programme (optional) takes place during the summer semester for a period of 6 weeks (full-time) and aims at the placement and training of undergraduate students who have completed their 3rd year of studies in industrial units, mechanical engineering design and technical companies, service companies and organizations that employ mechanical engineers. The primary objective of the Internship programme is for students to gain professional experience, enhance their knowledge, skills and communication capabilities as well as increase their chances of employment upon completion of their undergraduate studies.

## AREAS OF CONCENTRATION

Students enrolled in the Mechanical and Manufacturing Engineering programme must take a minimum of five elective courses ( 30 ECTS) from the list of technical elective courses. Elective courses from the following areas are offered: Mechanical Engineering, Manufacturing Engineering, Biomedical and Engineering and Materials Science and Engineering.

## AREAS OF RESEARCH

Research in the Department of Mechanical and Manufacturing Engineering covers a wide range of fields such as:

- Biomedical Engineering
- Computational Mechanics
- Materials Science and Engineering
- Mechanical System Modelling and Controls
- Micro- and Nano-technology
- Robotics
-Thermofluid Mechanics and Energy Systems


## COURSE DESCRIPTIONS

## Compulsory Courses

## MME 105 Experimental and Statistical Analysis I (5 ECTS)

This experimental course aims to introduce students to experimental techniques employed for the determination of physical parameters, the statistical analysis of experimental data, graphical methods for data presentation and to the preparation of laboratory reports. Moreover, one of its primary objectives is to enable the students to make the transition from the physical principles they have been taught, to engineering notions. During this course the students attend a series of seminars including health and safety regulations in laboratories, technical report writing, introduction to library services, etc.

## MME 106 Introduction to Engineering (5 ECTS)

Units and unit systems - Physical concepts such as forces, pressure, work, energy, temperature, heat - Newton's Laws - Motion - Inertial and Non-inertial Reference Frames Work and Energy - Equilibrium - Energy conservation Momentum conservation - Law of Gravity - States of Matter - Density and Pressure - Heat and Internal Energy Heat Capacity and Specific Heat - The First Law of Thermodynamics. Introduction to the profession of the Mechanical Engineer through seminars from professional engineers working in various sectors of the Cypriot economy. The students have the opportunity to discuss with the professional engineers a variety of issues at the end of each presentation.

## MME 107 Introduction to Electromagnetism (5 ECTS)

The aim of the course is to enhance students' comprehension of basic concepts and phenomena of Electromagnetism, and the development of problemsolving skills by using calculus. Particular emphasis is given on the relationship between the basic physical phenomena and their application in technology. Topics covered: Electric charge and matter; Electric field; Electrostatic potential; Capacitors and dielectrics; Electric current and resistance; DC circuits; Magnetism; Magnetic fields; Ampere's law; Faraday's law; Inductance and coils; Electromagnetic oscillations; AC circuits; Electromagnetic waves.

## MME 125 Statics (5 ECTS)

Moment of a force about a point and a given axis Replacement of a given system of forces by a simpler equivalent system - Equilibrium 3D problems of rigid bodies - Centroids and centers of gravity - Analysis of Structures - Trusses - Analysis of Trusses by the Method of Joints and Method of Sections - Frames - Equilibrium problems of rigid bodies including friction - Shear Force and Bending Moment - Calculate Moment of inertia of area and mass - Determine the moment of inertia of area and mass for composite bodies.

MME 145 Computer Aided Drafting (5 ECTS)
Engineers must be able to create and interpret detailed and assembled drawings in order to communicate their ideas. The course emphasizes the connection between the drawings and three-dimensional geometric models of a product and the product's design and manufacturing processes. Topics taught include: international conventions and standards; drawing scales; drawing line types; projection planes; views and view layout; isometric views; auxiliary views; sections; three-dimensional geometric modeling. All topics are implemented through a team project that develops an integrated three-dimensional model of a mechanical device. Autodesk Mechanical and SolidWorks are the software used to create drawings and geometric models.

MME 155 Material Science and Engineering I (5 ECTS)
This course is the first part of the series "Materials Science and Engineering" and includes: Crystal structure; Unit cells density - crystallographic directions and planes; Dislocations and Defects; Material microstructure; Diffusion - Elastic and Plastic Deformation; Stress vs Strain - Definition of Mechanical Properties (tensile strength, yield strength, Young modulus, Poisson ratio, ductility etc.); Strengthening of metals (grain size, solid solutions, cold work); Failure of materials; Fatigue; Creep; Phase diagrams and phase transformations; Heat treatment of metals; Annealing; Precipitation Hardening; Characteristics of common alloys, Processing and mechanical properties of metals and ceramics; Composite materials; Fiber Composites; Prediction of mechanical properties of composites.

## MME 156 Chemistry for Engineers (5 ECTS)

Atomic structure and chemical bonds. Chemical equations: Stoichiometry, moles, concentration, molarity, density etc. Chemical reactions between acids and bases; chemical reactions involving gases; combustion reactions. Redox reactions. Examples: electrolysis, corrosion, fuel cells, etc. Chemical Thermodynamics and Thermochemistry. Equilibrium: Equilibrium in physical processes, characteristics of a dynamic equilibrium, equilibrium in chemical reactions, equilibrium constant and equilibrium Law, parameters influencing the chemical equilibrium. Strength of acids and bases: The meaning of pH . Special topics: Polymers and Advanced materials and nanotechnology.

## MME 208 Programming and Numerical Methods (5 ECTS)

## Prerequisite: MAS 029

This course teaches the basic principles in computer programming and numerical methods. Through MATLAB, the students will be taught a wide range of topics in numerical methods and analysis in linear algebra, developing graphs and plots, root finding, numerical
solution of linear and non-linear systems, interpolation and approximation methods, numerical integration and differentiation, complex numeric algebra and an introduction to symbolic algebra.

## MME 215 Thermodynamics I (5 ECTS)

Units, dimensions and measurements; basic properties (pressure, temperature); equation of state for perfect gas; calorimetry; specific heat capacities; energy, internal energy, heat, work, entropy. Conservations laws in closed (control mass) and open (control volume) systems. 1st and 2nd law of thermodynamics, implications. Thermodynamic phase diagrams \& process paths. Introduction to thermodynamic cycles, isothermal, adiabatic and polytropic processes. Ideal Carnot cycle and steam cycles. Availability analysis and efficiency concepts.

## MME 216 Incompressible Fluid Mechanics I (5 ECTS)

## Prerequisite: MAS 025

Introduction to principal concepts and methods of Fluid Mechanics. Description of Fluids and their properties. Fluid statics: manometry, pressure, hydrostatics, buoyancy. Forces on submerged surfaces. Fluid shear and viscosity, Newtonian and non-Newtonian fluids. Open systems and control volume analysis; mass, momentum and energy conservation for moving fluids. The Bernoulli equation \& practical applications. Hydraulic jumps and waves in fluids. Differential fluid flow analysis, Continuity (mass conservation) and Navier-Stokes equation (momentum conservation)-analytical solutions.
Viscous fluid flows in pipes. Re-scaling and boundary layers.
External and internal flows. Forces on bodies, lift, drag. Introduction to flow measurement techniques. The course includes experimental exercises.

## MME 217 Heat Transfer (5 ECTS)

## Prerequisite: MAS 025

Thermal expansion and coefficients of conductivity and diffusivity. Mechanisms of Heat Transfer (HT). Electrical analog of HT , thermal resistance, equivalent thermal circuits. Steady conduction with or without internal heat sources, analytical solutions of flat walls, cylinders and spheres. Steady conduction in two dimensions, shape factors and numerical solutions. HT from finned surfaces. Transient HT. Dimensional analysis. Lumped capacitance method. Forced and natural convection. Boiling and condensation. Heat exchangers. The course includes the following laboratory exercises: 1. Thermal conductivity, 2. Coefficient of emissivity, 3. Effect of distance on thermal radiation, 4. Laboratory assignment in Matlab, 5.
Laboratory assignment in SolidWorks.

## MME 218 Thermodynamics II (5 ECTS)

## Prerequisites: MME 215 and MAS 025

This course is a continuation of the course MMK 215. Analysis of advanced systems for energy conversion,
heating and refrigeration. Behaviour and properties of nonreacting mixtures with emphasis on mixtures of ideal gases and application to air-conditioning systems: psychrometric, heating and cooling loads of buildings, system design. Design of thermodynamic systems using computer software. Introduction to the thermodynamics of compressible flows: speed of sound, Mach number, steady isentropic flows with choking, shock waves, convergentdivergent passages, compressibility effects with friction and heat transfer. The course involves laboratory exercises.

## MME 225 Dynamics (5 ECTS)

## Prerequisite: MME 125

The course is an introduction to the fundamental principles of dynamics applied in motion analysis of particles and rigid bodies. The topics that will be covered are: (a) kinematics of particles, (b) kinetics of particles (Newton's second law, D'Alembert's principle and dynamic equilibrium, energy and momentum), (c) impact: direct central; oblique central, (d) kinematics of rigid bodies, (e) planar kinetics of rigid bodies (forces and acceleration, energy and momentum), (f) introduction to dynamics of rigid bodies in three dimensions.

Laboratory Exercises: Study of mass moment of inertia and angular acceleration, study of centrifugal force on rotating masses, study of Coriolis force in rotating reference systems.

## MME 226 Mechatronics I (5 ECTS)

Prerequisites: MME 107 and MME 105
Circuit elements, waveforms, DC and AC circuits including RLC, power and power factor, transformers. Also, semiconductors, diodes, transistors, types and operation, rectifiers, photodiodes. Operational amplifiers, inverting, non-inverting, sum and difference, integrator, differentiator, buffer amplifiers. Digital electronics, binary arithmetic, logic gates NOT, OR, AND, NOR, NAND, XOR truth tables and circuits. Half/full adders. Introduction to sensors and actuators. The course also includes three lab sessions on circuits including passive and active elements thereby enhancing the skills and knowledge of students which were acquired in MME 105 on how to use multi meters, oscilloscopes, and waveform generators to build and analyse circuits.

## MME 227 Vibrations (5 ECTS)

## Prerequisites: MAS 025 and MME 225

Analysis and modeling of one-degree and two-degree of freedom vibrating systems. Derivation and interpretation of equations of motion. The notions of (un)damped natural frequency and resonance are defined using the system parameters. Two degree of freedom systems are studied in order to define the concept of mode shape. Computation of mode shapes and natural frequencies of two degree of
freedom systems. Computation of the frequency response function of forced two degree of freedom systems.

## MME 255 Materials Science and Engineering II (5 ECTS)

## Prerequisite: MME 155

This course is the second part of the series "Materials Science and Engineering". The first part of the course focuses on the thermal, electrical, magnetic and optical properties of metals, ceramics and polymers. The second part of the course discusses the means to select materials for engineering applications and the economic, environmental and any social issues related to the science and technology of materials.

## MME 256 Solid Mechanics (5 ECTS)

## Prerequisite: MME 125

The material being taught in this course covers the introduction and theoretical description of the fundamental notions in Solid Mechanics (stress and strain measures, stiffness, etc.), generalized theory of elasticity (Hooke's law), Mohr's circle (in 2D and in 3D), uniaxial stress analysis (tension, compression), uniform loading of plates, (elastic and elastoplastic) shaft torsion, (elastic and elastoplastic) beam bending and eccentric beam loading. The course also contains laboratory sessions that are supported by hands-on lab work and experiments of the following tests: tension (of ductile and brittle metals), compression, three-point and assymetric bending torsion and photoelasticity test.

## MME 257 Strength of Materials (5 ECTS)

## Prerequisite: MME 256

The material being taught in this course extends from MME 256 and covers issues related to the evaluation of stress concentrations and residual stresses, stress evaluation in composite members and structures, flexural loading of beams and shafts, buckling of slender bodies and structures, uniform loading of metallic plates, shells and pressure vessels, and a brief outline of the energy theorems and methods, and the failure criteria involved in (elasticperfectly plastic) metals, ceramic, polymers and fibrous materials.

## MME 307 Numerical Methods (6 ECTS) *

## Prerequisite: MME 208

This course is an introduction to numerical methods for the solution of real engineering problems. Topics covered include numerical integration and optimization and solution of ordinary and partial differential equations (ODEs and PDEs). Methods that are used for the solution of ODEs include the Implicit and Explicit Euler method, the Runge-Kutta methods and the Adams-Bashforth-Moulton methods. The solution of PDEs is performed with the finite
difference method in one and two-dimensions. Both steady state and time-dependent problems are solved. The course also covers a brief introduction to the finite element method. It includes a programming component for writing algorithms for the numerical solutions in FORTRAN and Matlab.

## MME 316 Incompressible Fluid Mechanics II (6 ECTS)

## Prerequisite: MME 216

Frictional flow in single pipes and networks, Moody diagram. Local losses and friction factors. Darcy-Weisbach equation, friction factors for laminar and turbulent pipe flows. Dimensional analysis and similarity, scale modelling. Low and high-speed aerodynamics. Boundary layers, Blasius solutions and separation. Compressible flows, subsonic, sonic and hypersonic flows, connection with thermodynamics. Introduction to turbulent flows. Fluid Machinery. Turbomachinery: conservation of angular momentum, principles of energy exchange, machine losses and characteristics; fluid pumps and fans operating point, cavitation. Experimental techniques in fluid dynamics. Laboratory Exercises: 1) Hydraulic gradient in pipe networks, 2) Pump performance, 3) experimental techniques in fluid dynamics.

## MMK 318 Thermal Engines (6 ECTS)

## Prerequisite: MME 218

Types, technologies and classification of thermal engines, thermodynamic cycles and performance Internal Combustion Engines (ICE), kinematics. Thermodynamic cycles and performance metrics. Timing, two-stroke and four-stroke ICE. Operating principles of Otto, Diesel, HCCl and gas turbines. Combustion of gas mixtures. Theoretical and actual cycles of reciprocating engines and gas turbines. Energy balance. Heat transfer, lubrication and cooling. Mixture formation, combustion and emissions. Turbocharging and supercharging. The course includes the following laboratory exercises: 1. Disassembly and assembly of an ICE engine, 2 . Torque and power output of a petrol engine, 3. Emissions experiment using a diesel engine.

## MME 321 Mechatronics II (6 ECTS)

## Prerequisite: MME 226

The first part of the course of Mechatronics II will cover basics aspects of Lab View such as the front panel, block diagram, numeric types, logical variables and operations, strings, arrays, matrices, graphs, controls, indicators, timing, structure, while and for lops, conditionals, data acquisition, signal processing and control. Students will be evaluated by programming exercises. In the second part of the course, DC brushless, stepper and servo motors will be taught with emphasis on laboratory exercises such as dynamic analysis, design and implementation of motor drive.

## MME 325 Modeling and Analysis of Dynamic Systems (6 ECTS) *

## Prerequisites: MAS 027 and MME 225

The course introduces a unified approach for modeling real dynamic systems. Modeling is accomplished using appropriate graphical or state-space equation models, in order to meet the requirements during the use of the models in design and automatic control. System analysis is used to calculate behavioural characteristics and to evaluate the accuracy of modeling assumptions. Topics taught include lumped parameter models; models with electric, fluid and thermal elements; interfaces; state-space equations; block diagrams; Laplace transforms - transfer functions; time and frequency domain response; stability. Students use Matlab/Simulink as a computational analysis tool. Laboratory exercises are used to identify parameters and demonstrate the interaction between different physical phenomena.

## MME 327 Control Engineering (6 ECTS)

## Prerequisite: MME 325

The course is an introduction to feedback control systems and the classical control theory. Topics covered: a) History and modern applications, b) Use of dynamical system modeling (mathematical models, Laplace transform, transfer function, block diagrams, system response), c) Feedback control setup and characteristics, d) Timedomain specifications, e) Stability and the Routh-Hurwitz criterion, f) Feedback properties and simple controllers, g) Steady-state analysis, h) Root locus analysis and design, i) Frequency response design and analysis using Bode plots and Nyquist plots.

Laboratory Exercises: Rotary flexible joint / flexible link arm control, Linear / rotary servo inverted pendulum control.

## MME 345 Machine Elements (6 ECTS)

## Prerequisite: MME 257

The course will teach methods for the calculation, selection and use of components (machine elements) required in Mechanical Engineering. The course first introduces engineering design principles, while also reinforcing students' understanding of material properties, load and stress analysis, deformation and elasticity, and theories of material failure. Subsequently, the main machine elements, their properties and selection procedure are defined. The machine elements studied include: shafts; screws/nonpermanent joints; welding/permanent joints; springs; roller/journal bearings, gears. The course includes a team project to design an engineering device and create its 3D geometric model on a computer.

Laboratory Exercises: Experimental setups for hands-on experience and demonstrations of the machine elements taught in this course.

## MME 346 Mechanical Design (6 ECTS)

## Prerequisite: MME 345

This consists of two parts: machine elements and design. The topics which are covered in the first part are: gears and power transmission, strength of gears, principles of operation of clutches and brakes, and the theory of flexible machine elements such as belts and chains. In the second part of the course the design process will be discussed in detail, starting from design brief preparation to the generation of ideas and concepts that could satisfy the needs as described in the design brief and ending with the materialization of the final product.

## MME 347 Design and Manufacturing ( 6 ECTS)*

## Prerequisite: MME 145

Introduction to modern Computer-aided Design and Manufacturing Technology, with emphasis on geometrical aspects (material aspects are covered in the course MME 348). Design by CAD, representation of 2D/3D lines, surfaces and objects, geometric processing by homogeneous transformations. Machining processes, material removal, non-traditional technologies, manufacturing by CAM. Shaping by deformation/flow of foil and bulk material, CAE analysis. Surface patterning by lithography, coating and etching, micro- and nanotechnology. Metrology, microscopy, scanning and machine vision, instruments and image processing. Tolerances, fits, surface quality and defects. Assembly and transportation with automation, robotics and navigation systems. Applications of design and manufacturing systems.

## MME 348 Manufacturing Processes (6 ECTS)

## Prerequisite: MME 347

This course will take a broad look at the various manufacturing processes for available engineering materials. The lecture material will be reinforced by laboratory sessions and exercises. Topics covered include: Introduction to manufacturing processes for engineering materials; Review of fundamental mechanics of plastic deformation; Structure and manufacturing properties of metals; Surface structure, treatments and tribology; Metalcasting and heat treatment processes; Bulk deformation processes: turning, milling, drilling, etc.; Material removal processes: abrasive, chemical, electrical and high-energy beams; Joining processes: soldering, brazing, welding, etc.; Micro- and nanofabrication.

## MME 405 Final Year Project I (7 ECTS)

The project is developed over the course of an entire year and is compulsory for all four-year Mechanical and Manufacturing Engineering students. It might be a group or an individual project. Faculty members suggest a topic list from which students in consultation with their chosen
advisors, make their selection. The purpose of this project is for students to solve an interesting engineering problem, with a combination of analytical, computational and / or experimental means.

## MME 406 Final Year Project II (8 ECTS)

## Prerequisite: MME 405

Continuation of the course "Final Year Project I".

## Technical Elective Courses

MME 416 Refrigeration, Heating, and Air-conditioning (6 ECTS)

## Prerequisites: MME 217 and MME 218

Analysis and design of Air-conditioning systems for maintaining comfort conditions in spaces of small and large buildings. Analysis of Refrigeration Systems for industrial and other applications. Climatological Data and comfort conditions; Psychrometry; Solar Loads; Airconditioning loads; Loads of Walls, Class Windows, Lighting, Human Heat, Devices; Refrigerants; Basic Refrigeration Cycles; Air Conditioning System: fan-coil units, air (variable flow or temperature), water/air, heat pump; Legislation.

## MMK 417 Energy Systems (6 ECTS)

## Prerequisite: MME 218

Energy and power, energy balance, conversion efficiency. Conventional, renewable energy sources. Steam \& gas turbines, Electric Motors, Generators. Cogeneration. Thermoelectrics and applications, fuel cells, operating principle and types, hydrogen as a fuel. Solar Energy and calculation of solar potential, solar geometry. Solar thermal systems. Photovoltaics, formulas, curves and operating performance. Wind energy and wind power, wind turbines, wind farms. Hydro energy. Biomass, Biogas. Geothermal, wave energy and marine currents. The course includes laboratory exercises.

## MME 418 Compressible Flow (6 ECTS)

Prerequisites: MME 215, MME 218 and MME 307
Compressible gas flow is a topic of interest in contemporary engineering applications. This course introduces the fundamentals of the compressible flow of gases and includes the following: appropriate conservation laws; propagation of disturbances; isentropic flows; Mach number, speed of sound and regimes in compressible flow; one-dimensional steady compressible flow; choking in isentropic flow; isentropic flow in convergent-divergent passages; normal shock wave relations, oblique shock waves, weak and strong shocks, shock wave structure; compressible flows in ducts with area changes, friction, or heat addition; Prandtl-Meyer function. The emphasis will be on the physical understanding of the phenomena and basic analytical techniques.

## MME 419 Modern Computational Tools for Engineers ( 6 ECTS)

Prerequisites: MME 208 and MME 307
Computational engineering refers to the process of translating the description of physical systems into models that can be analyzed using computers. The use of computational tools for analysis is part of the everyday routine of engineers. When properly used computational tools are a powerful ally that every engineer should be able to rely on. This course offers an introduction to Object Oriented Scientific Programming (OOSP) as a paradigm for the design and development of effective scientific programs. Emphasis is placed on the tremendous capabilities unleashed in Fortran 2008/2015, which allows parallel programmes to be developed and executed on personal computers with minimal overhead. The process of modeling of physical systems and the subsequent programme design and development are treated as a unified process. Programming skills are developed through a series of examples from various branches of Mechanical Engineering, such as fluid dynamics, energy storage conversion and transfer, and biomedical engineering.

## MME 420 Robotics (6 ECTS)

Prerequisite: MME 327
The course is an introduction to robotics with emphasis on robotic manipulators. Topics covered: (a) History, types of robots, applications, (b) Terminology, kinematic chain, endeffectors, (c) Coordinate transformations, rotation matrices, and homogeneous transformations, (d) Forward kinematics analysis, Denavit-Hartenberg procedure, inverse manipulator kinematics, (e) Velocity kinematics, Jacobian matrix, inverse velocity kinematics, singular configurations, (f) Dynamics modeling using the method of Newton-Euler and Lagrange, equations of motion, (g) Feedback control schemes, trajectory planning, (h) Sensors and actuators, (i) Specifications of industrial robots and safety.

## Laboratory Exercises:

- Motion planning and programming of basic pick-andplace tasks.
- Industrial application simulation using a belt conveyor.


## MME 421 Advanced Dynamics and Applications (6 ECTS)

## Prerequisite: MME 225

The course focuses on the motion of rigid bodies in threedimensional space. Kinematics and dynamics of rigid bodies are studied in order to derive the equations of motion using various modern approaches. Topics taught include inertia properties and angular velocity; NewtonEuler equations of motion; degrees-of-freedom and constraints; kinetic/potential energy and virtual work; Lagrange's equations for holonomic systems; numerical analysis of derived equations of motion. The formulations
are applied to various multi-body dynamics problems that arise in mechanical and aerospace engineering, and the special case of planar mechanisms is also studied. Students use generalized and specialized software, like Matlab and SolidWorks, to analyze rigid-body systems.

## MME 426 Vibrations Theory and Applications (6 ECTS)

## Prerequisite: MME 227

This course studies the vibrations of multiple and infinite degree of freedom linear systems. The theory of vibration absorption is described in detail. The partial differential equations describing the behaviour of infinite degree of freedom systems are derived from the basic principles. The distinctive qualitative and quantitative characteristics of non-linear systems are described. The following topics are covered: structure of dynamics and dynamical examples from various scientific disciplines, generalized coordinates, vibrations of multi-degree and infinite degree of freedom systems, non-linear system behaviour characterization: limit cycles, bifurcations and chaos.

## MME 435 Introduction to Biological Biomedical Engineering (6 ECTS)

## Prerequisite: MME 208

Basic cell biology: Cell structure, biopolymers, transcription and translation, signal transduction. Examples of organ structure and physiology. Experimental methods (genomics, proteomics, imaging). The molecular basis of disease. Cells and organs as biological machines: Biomechanics and extracellular matrix remodeling. Blood flow in vessels. Transport phenomena in drug delivery. Biological oscillators. Analysis of signal transduction networks. Research case studies: Biomaterials and stem cells in regenerative medicine. Biomarkers in disease diagnosis and treatment. Devices for 3D in vitro cell culture. Gene network design. Bioinformatic analysis in genomics and proteomics. Medical device design and commercialization. Ethical issues.

## MME 436 Cell and Tissue Mechanics (6 ECTS)

The aim of the course involves the study of the mechanical behaviour of native human tissues and how their mechanical properties are related to tissue function and pathology. Basic knowledge of mechanics (stresses, deformations, balance laws) will be employed in order to study the mechanical response of tissues such as arteries, heart valve leaflets, muscle tissue and bones. Subsequently, it will be shown how changes in the mechanical properties of these tissues can lead to diseases such as hypertension, and arteriosclerotic plaques. The course does not require knowledge of Biology.

## MME 442 Laser-based Manufacturing Applications (6 ECTS)

Prerequisites: MME 347 and MME 348
Lasers are part of everyday tasks, such as reading grocery prices and printing or copying paper documents. This
course emphasizes on the innovative use of lasers in manufacturing and material processing. Topics covered include: Laser background and general applications; Additive manufacturing (selective laser melting and sintering); Laser joining (welding of metals and plastics); Laser surface processing and modifications (texturing and coating deposition, and general surface processing and modification applications); Micro-manufacturing (laser cutting, drilling and welding). The lecture material will be reinforced by laboratory sessions and exercises.

## MME 443 Advanced Metal Working Processes (6 ECTS)*

## Prerequisites: MME 347 and MME 348

Manufacturing technologies are used to produce components of various shapes and sizes. This course focuses on manufacturing technologies commonly used by industry, with the focus on forging and sheet metal forming. The topics covered in the course include: scientific understanding of cold, warm and hot forging and cold and warm sheet metal forming processes, component and tooling design principles to maximize mechanical performance, modelling theory and analytical analysis of material behaviour under cold, warm and hot operations, innovations in metal forming to maximize component performance. Laboratory Exercises: Cold and hot forging Material strengthening - Sheet blanking, bending and forming.

## MME 451 Linear Static and Dynamic Finite Element Analysis of Solids (6 ECTS)

## Prerequisites: MME 257 and MME 307

The material of this course in finite elements (FE) identifies two major parts: the simulation and analysis of linear elastostatic boundary value problems, and the modelling of transient (time-dependent) solid mechanics problems. This course covers also essential material in computational solid mechanics using FEM for final year undergraduates in Mechanical Engineering, Bioengineering and Civil Engineering. Students will also receive hands-on training using the ANSYS software in the FE: •analysis of 3D trussnetworks, analysis of plane stress/strain problems, design and analysis of quasi-static and transient elasticity problems in 3D, computational evaluation of eigenmodes and eigenfrequencies in structures.

## MME 452 Introduction to Nanoscience and <br> Nanotechnology (6 ECTS)

Prerequisites: MME 155 and MME 255
Introduction Historical overview; Feynman; Downscaling, Moores Law, The advent of nanotechnology; Length scales, meso, micro, nano; The definition of nanoscale; Zero, One, Two- and Three-Dimensional Materials; Growth Methods and Mechanisms CVD, PLD, MBE, ELD, SILAR, CBD.
Properties Fundamental electrical, optical and thermal properties of low dimensional materials; Integration; Top down versus bottom up assembly; Directed and Templated

Assembly; Self-Assembly; Lithography: Nanosphere, Electron Beam, Ion beam, Photo and Nano Imprint; Throughput; Ordered and Disordered Assemblies; Surface to Volume Ratio; Applications Solar, Super Capacitor, Water splitting; Hydrogen Generation and Storage; Energy Harvesting.

## MME 456 Properties of Polymers and Polymer Processing (6ECTS)*

## Prerequisite: MME 155

The course MME 456 aims at delivering special knowledge and skills on topics such as the structure-to-property relationship in polymers, their rheological behaviour, mechanical properties and the use of various methods in polymer processing. Besides the theoretical background, students are also exposed to laboratory exercises and attend laboratory demonstrations related to the investigation of the thermomechanical properties of polymers, fabrication of different plastic products and the processing of polymer solutions towards the generation of ultrathin fibers by electrospinning. Moreover, during the course the students visit a local company (polymer processing manufacturer).

MME 457 Material Measurements and Testing (6 ECTS)
Measurements methodology. Metrology. Quality in measurements and testing. Reference materials. Accreditation. Measurements of mechanical properties - elasticity, plasticity, hardness, strength, fracture - standards - applications limitations. Measurements of thermal properties - thermal conductivity, heat capacity, enthalpy, thermal expansions standards - applications - limitations. Measurements of electrical properties - electrical conductivity, measurements in metals and semiconductors - standards - applications limitations. Nondestructive testing and reliability evaluation standards - applications - limitations. Materials testing for corrosion - standards - applications - limitations. Materials testing for friction and wear - standards - applications limitations. The course includes labs on selected techniques.

MME 458 Materials for Energy and Environment (6 ECTS)
Prerequisite: MME 255
The course addresses questions such as: How rising energy demands are met? How are rising demands met? What are the options? Are there viable long-term solutions for the future? In addition, the course introduces students to the fundamental materials science at the heart of: Renewable energy sources, Nonrenewable energy sources, Future transportation systems, Energy efficiency, Energy storage and, CO2 capture and storage.

MME 459 Composite Materials Science and Engineering (6 ECTS)
Prerequisites: MME 155 and MME 156
Length scales, dimensionality, three, two, one and zero dimensional materials. Definition of nano, meso and macro scales. One dimensional materials: fibers, nanowires, nanorods, nanotubes; organic and inorganic, e.g. carbon, polymethylmethacrylate etc. Methods of production. Ordered versus disordered networks of one-dimensional materials. Assembly, self-assembly, bottom-up versus top down approaches. Fabrication methods of ordered networks and additive manufacturing. Matrix materials e.g. metal, polymers etc. Prepreg composites. Naturally occurring fiber materials e.g. balsa wood, spider silk and their applications. Engineering applications, aerospace, marine, automotive, energy related.

* These lessons are taught in English.


## ANALYTICAL PROGRAMME OF STUDIES

|  | ECTS |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1st YEAR |  | 3rd YEAR |  |
| Fall Semester |  | Fall Semester |  |
| MAS 025 Engineering Mathematics I | 5 | MME 307 Numerical Methods | 6 |
| MAS 029 Elements of Linear Algebra | 5 | MME 316 Incompressible Fluid Mechanics II | 6 |
| LAN 100 General Advanced English | 5 | MME 325 Modeling and Analysis of Dynamic Systems | 6 |
| MME 105 Experimental and Statistical Analysis | 5 | MME 345 Machine Elements | 6 |
| MME 106 Introduction to Engineering | 5 | MME 347 Design and Manufacturing | 6 |
| MME 145 Computer Aided Design | 5 | TOTAL | 30 |
| TOTAL | 30 |  |  |
|  |  | Spring Semester |  |
| Spring Semester |  | MME 318 Thermal Engines | 6 |
| MAS 026 Engineering Mathematics II | 5 | MME 321 Mechatronics II | 6 |
| LAN 104 English for Technical Purposes | 5 | MME 327 Control Engineering | 6 |
| MME 107 Introduction to Electromagnetism | 5 | MME 346 Mechanical Design | 6 |
| MME 125 Statics | 5 | MME 348 Manufacturing Processes | 6 |
| MME 155 Material Science and Engineering I | 5 | TOTAL | 30 |
| MME 156 Chemistry for Engineers | 5 |  |  |
| TOTAL | 30 | 4th YEAR <br> Fall Semester |  |
| 2nd YEAR |  | MME 405 Final Year Project I | 7 |
| Fall Semester |  | MME 4... Technical Elective Course | 6 |
| MAS 027 Engineering Mathematics III | 5 | MME 4... Technical Elective Course | 6 |
| MME 215 Thermodynamics I | 5 | MME 4... Technical Elective Course | 6 |
| MME 225 Dynamics | 5 | Elective Course | 5 |
| MME 226 Mechatronics I | 5 | TOTAL | 30 |
| MME 255 Materials Science and Engineering II | 5 |  |  |
| MME 256 Solid Mechanics | 5 | Spring Semester |  |
| TOTAL | 30 | MME 406 Final Year Project II | 8 |
|  |  | MME 4... Technical Elective Course | 6 |
| Spring Semester |  | MME 4... Technical Elective Course | 6 |
| MME 208 Programming and Numerical Methods | 5 | Elective Course | 5 |
| MME 216 Incompressible Fluid Mechanics I | 5 | Elective Course | 5 |
| MME 217 Heat Transfer | 5 | TOTAL | 30 |
| MME 218 Thermodynamics II | 5 |  |  |
| MME 227 Vibrations | 5 |  |  |
| MME 257 Strength of Materials | 5 |  |  |
| TOTAL | 30 |  |  |

TECHNICAL ELECTIVE COURSESMME 416 Refrigeration, Heating and Air-conditioning6
MME 417 Energy Systems ..... 6
MME 418 Compressible Flow ..... 6
MME 419 Modern Computational Tools for Engineers ..... 6
MME 420 Robotics ..... 6
MME 421 Advanced Dynamics and Applications ..... 6
MME 426 Vibrations Theory and Applications ..... 6
MME 427 Dynamics of Machines and Mechanisms ..... 6
MME 435 Introduction to Biological and Biomedical Engineering ..... 6
MME 436 Cell and Tissue Mechanics ..... 6
MME 442 Laser-based Manufacturing Applications ..... 6
MME 443 Advanced Metal Working Processes ..... 6
MME 451 Linear Static and Dynamic Finite Element Analysis of Solids ..... 6
MME 456 Properties of Polymers and Polymer Processing ..... 6
MME 457 Material Measurements and Testing ..... 6
MME 458 Materials for Energy and Environment ..... 6
MME 459 Science, Technology and Manufacturing of Fiber Materials ..... 6


THE GRADUATE SCHOOL

www.ucy.ac.cy/graduateschool/en

## THE GRADUATE SCHOOL

## DEAN

Haridimos Tsoukas, Professor,
Department of Business and Public Administration

## VICE-DEAN

Panayiota Pyla, Associate Professor, Department of Architecture

## GENERAL INFORMATION

The University of Cyprus anticipates further growth of its graduate education with the establishment of the Graduate School in 2012. The Graduate School provides support to more than 1800 postgraduate students from Cyprus and abroad. The Graduate School differs from other faculties of the University, since its components are not departments, but their postgraduate programmes. The Graduate School provides support for the development, evaluation and promotion of graduate education throughout the University.

The Graduate School provides administrative support to postgraduate programmes and ensures for academic excellence and integrity. In order to enhance the presence and contribution of UCY as a local higher education and research institution, the Graduate School adopts and implements effective policies, provides reliable information, enriches its postgraduate programmes by forming partnerships with local, state and other international bodies and develops programmes in international languages, other than the ones taught in Greek and Turkish language.

Another objective of the Graduate School is to explore the provision of financial support to postgraduate students, through the award of scholarships and grants in exchange for a research or teaching work assistance.

## OBJECTIVES OF THE SCHOOL

The objectives of the Graduate School are the following:
-To adopt quality assurance indicators to ensure the quality of the postgraduate programmes and of the degrees awarded.

- To encourage interdepartmental and interuniversity doctoral programmes of study, including research programmes. To encourage more collaboration between departments in programmes development, in order to create synergies.
- To assist the academic departments in obtaining external financial support for postgraduate studies and research. To explore further the cooperation with local, state and other international bodies, to leverage external funding and enhance research culture.
- To offer scholarships and grants to postgraduate students in exchange for a research or teaching work assistance.
- To develop programmes in international languages other than the official languages of the University.


## humanities




## FACULTY OF HUMANITIES

Department of English Studies
Department of French and European Studies Department of Turkish and Middle Eastern Studies

Language Centre

## FACULTY OF HUMANITIES



## DEPARTMENT OF ENGLISH STUDIES

The Department of English Studies offers a B.A. Degree in English Language and Literature. After a general course of study in the first year, students opt for one of three distinct tracks: a) Anglophone Literature and Cultural Studies,
b) Theoretical and Applied Linguistics or c) Translation Studies.

The Department offers four minor programmes: a) Anglophone Literature and Cultural Studies, b) Theoretical and Applied Linguistics, c) Gender Studies,
d) American Literature and Culture. It also participates in the interdepartmental undergraduate programme in Modern Languages and European Studies. As part of its mission to promote research, collaboration and exchange of faculty and students, the Department has developed links with numerous universities abroad and international institutions.

## CHAIRPERSON

Stella Achilleos

## VICE-CHAIRPERSON

Maria Margaroni

## PROFESSORS

Kleanthes K. Grohmann
Phoevos Panagiotidis

## ASSOCIATE PROFESSORS

Stella Achilleos
Antonis Balasopoulos
George Floros
Maria Margaroni
Anastasia Nikolopoulou
Evy Varsamopoulou

## ASSISTANT PROFESSOR

Vasso Giannakopoulou

## LECTURERS

Spyros Armostis
Sviatlana Karpava
Konstantinos Kritsis

## PHILOSOPHY AND OBJECTIVES OF EACH TRACK

## A) Anglophone Literature and Cultural Studies

## Philosophy

This track offers the possibility of comparative study and analysis of anglophone and related literatures, and engages in depth with major authors, the most significant literary genres, periods and movements, applying a range of critical and methodological approaches to the interpretation of texts within different geographical and historical contexts.

Given the contemporary transcultural emphasis in the field of English language and literature, attention will be given to the critical and interdisciplinary analysis of social and cultural practices at both the local and the global level. The aim is to develop the ability to identify ethical and sociopolitical issues in literature, art and culture more generally, within a broader understanding of the current role of the critical humanities.

## Objectives

The track in Anglophone Literature and Cultural Studies is designed to provide students with the ability to:

- Develop a high level of communicative competence in the English language.
- Master the standards and conventions of academic discourse and writing.
- Apply a range of critical and methodological approaches to the study of literary and related texts.
- Identify and evaluate relevant sources of information and to use them critically in the process of developing knowledge and interpretations.
-Think and articulate ideas creatively, and to become critical and self-reflective independent learners.


## B) Theoretical and Applied Linguistics

## Philosophy

This programme highlights the epistemological significance of Linguistics and offers students a scientific study of Linguistics focused on two axes: Theoretical and Applied Linguistics.

Theoretical linguistics focuses on the examination of the structure of English at all levels of representation (phonetics, phonology, morphology, syntax). Further objects of study are: the significance and interpretation of language within (semantics) and outside (pragmatics) its structure, language change (historical Linguistics), language in the inner world of the individual (first
language acquisition, language disorders) and comparative linguistics. Applied linguistics investigates the pedagogical aspects of language teaching, providing efficient training in the teaching of English as a foreign language. Other branches of applied linguistics offered are, for instance, second language acquisition and sociolinguistics.

## Objectives

The track in Theoretical and Applied Linguistics is designed to provide students with:

- A high level of communicative competence in the English language.
-The theoretical background necessary to understand the structure and use of language in general and of the English language in particular.
-The ability to use knowledge of linguistics and the English language in research and teaching.


## C) Translation Studies

## Philosophy

The track in Translation Studies focuses on the theory and practice of translation, but also on the wider field of intercultural studies and its interaction with translation. Translation is no longer considered an exclusively language-related phenomenon, but is rather perceived as an intercultural practice, given that comparative skills and an intercultural perspective constitute an important foundation for the study and practice of translation.
The Department of English Studies is offering this track in response to students' need for alternative professional opportunities, especially in light of the rapid growth of translation as a profession around the world in the past decades.

## Objectives

The track in Translation Studies is designed to provide students with:

- A high level of communicative competence in the English language.
-The fundamental critical and practical skills needed for various areas of language transfer between English and Greek.
-The theoretical background necessary to develop an awareness of translation as an intercultural activity beyond language.

In addition to the objectives specific to each track, the B.A. Degree in English Language and Literature aims to help
students develop the reflective awareness, characteristic of the Humanities, that problems of knowledge and truth cannot be divorced from the textual and historical conditions of their emergence.
To achieve these objectives, the programme offers a range of courses in Language Development, Theoretical and Applied Linguistics, Literature, History and Culture, Literary Theory, Translation Theory and Practice, Research and Teaching Methodology. Students who successfully complete the programme may:

- Pursue a career in teaching, professional translation, public or foreign service, and media and communication.
- Undertake postgraduate studies in a wide variety of areas, including British, American or Comparative Literature, Literary Theory, Cultural Studies, Theoretical and Applied Linguistics, Translation Studies, Theatre Studies, Media and Communication Studies.
English is the language of instruction in all courses; therefore, a high level of proficiency is required for admission to the programme. All courses are credited in ECTS.


## DEGREE REQUIREMENTS

A) For a B.A. Degree in English Language and Literature with a specialization in Anglophone Literature and Cultural Studies, the course requirements are as follows:

Number of Courses ECTS

| Language Component | 3 | 15 |
| :--- | ---: | ---: |
| Professional Training | 1 | 7.5 |
| Core \& Track Electives | $18-20$ | 117.5 |
|  | (minimum) |  |
| Core \& Other Electives |  |  |
| (from other Tracks) | $9-11$ | 65 |
|  | (maximum) |  |
| Foreign Language (non-English) | 3 | 15 |
| University Electives | 4 | 20 |

B) For a B.A. Degree in English Language and Literature with a specialization in Theoretical and Applied Linguistics, the course requirements are as follows:

Number of Courses ECTS

| Language Component | 3 | 15 |
| :--- | ---: | ---: |
| Professional Training | 1 | 7.5 |
| Core \& Track Electives | $17-19$ | 110 |
|  | (minimum) |  |
| Core \& Other Electives |  |  |
| (from other Tracks) | 10-12 | 72.5 |
|  | (maximum) |  |
| Foreign Language (non-English) | 3 | 15 |
| University Electives | 4 | 20 |

C) For a B.A. Degree in English Language and Literature with a specialization in Translation Studies, the course requirements are as follows:

## Number of Courses ECTS

| Language Component | 3 | 15 |
| :--- | ---: | ---: |
| Professional Training | 1 | 7.5 |
| Core \& Track Electives | $12-14$ | 82.5 |
|  | (minimum) |  |
| Core \& Other Electives |  |  |
| (from other Tracks) | $13-15$ | 100 |
|  | (maximum) |  |
| Foreign Language (non-English) | 3 | 15 |
| University Elective | 4 | 20 |

## OVERALL DEGREE ORGANIZATION

As indicated by the course codes, the courses of the B.A. in English Language and Literature are divided into groups and levels, depending on the year and/or the track in which they are offered. The following courses are compulsory for all students on the programme:
ENG 101-170 Language Components and Introductory Courses
ENG 350 EFL Methodology
Besides these, the students in each track are required to take courses as follows:

## Tracks

A) For the track in Anglophone Literature and Cultural Studies, students must choose two courses from each of the following areas:
ENG 211-219 Topics in the Study of Fiction
ENG 220-229 Topics in the Study of Poetry
ENG 330-339 Topics in the Study of Drama
In addition to these courses, the following course is compulsory for all students:
ENG 310 History of Literary Theory and Criticism
B) For the track in Theoretical and Applied Linguistics, students must choose one course from each of the following areas:

ENG 250-255 Topics in Phonetics and Phonology of English
ENG 256-259 Topics in Semantics and Pragmatics ENG 260-269 Topics in Morphology and Syntax In addition to these choices, the following courses are compulsory for all students:
ENG 240 Pedagogical Grammar
ENG 241 Sociolinguistics
ENG 340 Language Change and Development
ENG 341 Psycholinguistics
C) For the track in Translation Studies, all of the following courses are compulsory:

ENG 270 Translation Methodology
ENG 280 Translation Theory
ENG 390-399 Topics in Translation Studies

## Track Seminars

Students of each track must choose at least eight seminar courses in their track.
ENG 500-539 Anglophone Literature and Cultural Studies ENG 540-569 Theoretical and Applied Linguistics ENG 570-599 Translation Studies

## DESCRIPTION OF MINOR PROGRAMMES

## A) Minor in Anglophone Literature and Cultural Studies

Students taking a minor in Anglophone Literature and Cultural Studies are required to fulfil the Foreign Language Requirement in English in addition to ten courses in English Literature (60 ECTS). The composition of the course requirements is as follows:
(a) Four Compulsory Introductory courses (20 ECTS)

ENG 103 Academic Essay Writing
ENG 110 Introduction to the Study of Fiction
ENG 120 Introduction to the Study of Poetry
ENG 130 Introduction to the Study of Drama
(b) Three Courses chosen from among the following, one from each rubric (17.5 ECTS):
ENG 211-219 Topics in Fiction
ENG 220-229 Topics in Poetry
ENG 330-339 Topics in Theatre
(c) Three Courses chosen from among the electives (ENG 500-539) offered in the Anglophone Literature and Cultural Studies track (22.5 ECTS)
Choices will be made in accordance with students' interests and the guidance of faculty members of the Literature Section. Students may opt to take ENG 310 History of Literary Theory and Criticism in lieu of an elective.

## B) Minor in Theoretical and Applied Linguistics

Students taking a minor in Theoretical and Applied Linguistics are required to fulfil the Foreign Language Requirement in English, in addition to ten courses required for the minor.
(a) Six Compulsory Courses

ENG 160 Introduction to Linguistics
ENG 240 Pedagogical Grammar
ENG 250-255 Topics in Phonetics and Phonology of English
ENG 260-269 Topics in Morphology and Syntax of English

ENG 256-259 Topics in Semantics and Pragmatics
One of the following:
ENG 241 Sociolinguistics
ENG 341 Psycholinguistics
ENG 350 EFL Teaching Methodology

## (b) Four Additional Courses

Four courses must be taken from the Linguistics and/or Professional components of the B.A. programme in English Language and Literature. All course choices are subject to the approval of the Department.

## C) Gender Studies

The programme is offered in collaboration with the following Departments: Byzantine and Modern Greek Studies, Education, French and European Studies, History and Archaeology, Business and Public Administration. Students are required to take ENG 500 Introduction to Feminist Theory and a sufficient number of the designated Elective Courses in order to graduate with 60 ECTS. Given the interdepartmental nature of the programme, students are required to take courses from at least three different departments. Available options will vary from year to year, according to the interests of members of staff and the needs of the collaborating departments. Specific options will be announced before the beginning of each semester. After consultation with their advisor and instructors, students may choose up to two postgraduate courses in Gender Studies. They may also conduct independent research in a relevant area under the supervision of one of the collaborating academics.

## D) American Literature and Culture

Students must attend seven Compulsory Courses and at least two Elective Courses in American Literature and Culture offered by the programme in Anglophone Literature and Culture. The tenth course required for the minor may be: a) a third elective course in the field, from the courses offered by the programme, b) an Independent Study project related to the field, supervised by a qualified faculty member or c) a relevant course in another programme. In the second and third cases, approval by the Department of English Studies and by the relevant instructor is required.

## List of Compulsory Courses

ENG 110 Introduction to the Study of Fiction
ENG 130 Introduction to the Study of Drama
ENG 211-219 Topics in Fiction
ENG 317 History of Literary Theory and Criticism
ENG 220-229 Topics in Poetry
ENG 534 Seminar in American Studies I
ENG 535 Seminar in American Studies II

## COURSE DESCRIPTIONS

## A) Language Component <br> ENG 101 English for Academic Purposes (5 ECTS)

This course aims to familiarize students with academic communication in English. It is divided into the following four components: academic listening, academic reading, academic writing, and developing seminar skills. Each course component will equally help students overcome some of the linguistic difficulties involved in studying English in academic contexts. The practice of obtaining academic communication skills is supported by readings in literature and in-class discussions.

ENG 102 Research Skills in the Humanities ( 5 ECTS)
The course aims to offer students of the Department systematic guidance in writing academic papers. It aims to function as a preparatory course in order to enhance the research skills needed for papers and presentations in Literature, Linguistics and Translation. The course comprises four main areas (a) acquainting students with the University library and electronic catalogues, (b) working with the Internet, (c) introducing MS-Word and PowerPoint, and (d) dealing with problems of correct citation of bibliography.

## ENG 103 Academic Essay Writing (5 ECTS)

This course is designed to be a gateway to the English major. It reviews the areas students can focus on within current-day English studies and examines the way such basics of academic argument as thesis, evidence, and structure are applied to various types of academic essays. It then turns their attention to three focus areas: (a) writing critically about Linguistics, (b)writing critically about Literature, and (c)writing critically about Translation. Throughout the course, students will get hands-on practice with planning out, researching, and (re)writing intellectually sophisticated essays of the kind that they will be expected to write in upper-level courses within the major.

## B) Literature Component

ENG 110 Introduction to the Study of Fiction (5 ECTS)
The course introduces students to key principles and critical approaches in the study of fiction. Different types of fiction are discussed, as well as the history and formation of fictional genres. The class will read one or two novels and several short stories and will discuss the main narrative elements, as structuralist theory has defined them. It will also trace the changes these elements have undergone in specific historical periods and in the context of different literary traditions.

ENG 120 Introduction to the Study of Poetry (5 ECTS)
The course introduces students to different historical genres of poetry and to a systematic literary study of the elements of poetry by concentrating on structure, figurative language, metrical arrangements, rhythm and diction.

ENG 130 Introduction to the Study of Drama (5 ECTS)
The course aims to develop in each student an imaginative, meaningful and enriching experience of drama both as a reading experience and as dramatic performance. The students will be introduced to the techniques of systematic study of drama texts and genres, by emphasizing such elements as dramatic structure, character, dialogue and point of view.

## ENG 211-219 Topics in Fiction: Studies in the 18th Century Novel (5 ECTS)

In this cluster of courses, students will study major novels by the most influential prose fiction writers that helped shape the emerging genre of the English novel in the early to mid-eighteenth century. The historical conditions of the 18th century in England, the particular situation of each writer, but also wider social realities and economic conditions will be discussed, in order to achieve a fuller appreciation of the novels' cultural historical signification. Questions of genre will form a substantial concern in the reading of the novels, as will English literary history.

ENG 211-219 Topics in Fiction: Studies in 19th Century Fiction (5 ECTS)

This cluster of courses will concentrate on questions of literary history, aesthetics and politics in the study of Victorian fiction from the 1830s to the end of the 19th century. Particular areas of focus may include the aesthetics of literary realism and naturalism, the study of fictional genres (Victorian gothic, the Bildungsroman, the social or industrial novel, domestic fiction, detective fiction), stylistic modes (sentimentality, bathos, decadence) and socio-historical contexts (the industrial revolution, empire and imperialism, the separation of social spheres on the basis of gender, class struggle, crime, deviance and policing, Victorian and late Victorian sexualities).

ENG 211-219 Topics in Fiction: Postcolonial Fiction (5 ECTS)
This cluster of courses will focus on the development, in the post-war period, of Anglophone postcolonial fiction, its rise to global prominence, and its relationship to the decentralization and, effectively, the globalization of "English studies". Particular areas of focus may include questions of literary history (magical realism, the impact of orality and oral traditions, the reinvention of myth, the re-appropriation of the canon, the relationship between
postcolonialism and postmodernism), and the study of the role of specific geographical regions or transregional formations.

ENG 211-219 Topics in Fiction: Studies in Shorter Fiction (5 ECTS)
This course will focus on the study of shorter fiction from the perspective of literary history, genre theory, and aesthetics. It will concentrate on the generic pre-history of Shorter Fiction, its basic forms (short story, novella), its initial aesthetic codification during the American Renaissance (Poe, Hawthorne, Melville), and its generic expressions (detective fiction, mystery fiction, the ghost story, allegorical fable, parable, science fiction story, among others). Texts studied will include works by outstanding Anglophone pioneers of the genre and of its generic subdivisions.

## ENG 211-219 Topics in Fiction: Modern and Postmodern Fiction (5 ECTS)

The aim of this cluster of courses is to familiarize students with the most representative practices in the area of Anglophone Fiction, as well as with the critical and theoretical discourses that have dominated this field from the beginning of the 20th century to the present. More particularly, courses will focus on the critical engagement with the tradition of realism, tracing the debates around issues which in modern and contemporary fiction are considered fundamental, i.e. the function and reliability of representation, the narrative construction of identity, the relation between history and story, the politics of metafictional discourse, and the gradual erasure of the distinction between popular fiction and avant-garde writing.

ENG 220-229 Topics in Poetry: Poetry of the Early Modern Period (5 ECTS)

Courses offered in this area concentrate on the history and development of the English poem in the early modern period. Through the study of selected texts, students will consider the development of a variety of poetic genres and literary traditions (such as the sonnet; the courtly lyric; metaphysical poetry; the epic and the pastoral). Considering texts in relation to the broader social and cultural context of the early modern period, students will further be introduced to a wide set of issues, such as the politics of the Reformation and Renaissance humanism; the politics of class and gender; colonization and England's expansion in the New World.

## ENG 220-229 Topics in Poetry: Poetry of the Long 18th

 Century (5 ECTS)Courses offered in this area focus on English poetry of the long eighteenth century (the period between the Restoration of monarchy in 1660 and the late 1780s).

Through the reading of selected texts, students will examine various issues that marked the production of poetry during this period (such as neoclassicism; the use of satire; gender and class; poetry as a force for social change; popular literacy and the growth of print culture). Situating texts within the broader social, cultural and ideological framework of their production, students will further be introduced to current scholarly debates concerning the poetry of the period.

ENG 220-229 Topics in Poetry: Studies in Romantic and Victorian Poetry (5 ECTS)

Courses in this area will focus on the primary significance of lyrical poetry in British Romantic and Victorian Poetry. Poets considered will be: William Blake, Robert Burns, William Wordsworth, Samuel Taylor Coleridge, John Keats, George Gordon Lord Byron, Percy Bysshe Shelley, Elizabeth Barrett Browning, Robert Browning, Christina Rossetti, Alfred Lord Tennyson and Thomas Hardy. Attention will be given to themes and issues of Romantic poetics and aesthetics foregrounded in the prose writings of such key figures as Wordsworth, Coleridge and Shelley. We will also consider the importance of politics and sage discourse, the development of modern poetics and of new themes in Victorian poetry.

## ENG 220-229 Topics in Poetry: Major Themes and Voices in 20th Century Poetry ( 5 ECTS)

This cluster of courses will take a critical and comparative approach to modern poetry in English in the twentieth century. The focus will be on poetry from the UK and the USA by poets who have achieved significant critical recognition as well as popular acclaim. The selection aims to give some idea also of post-colonial poetry and the greater diversity of voices (writing in English). The course lecture programme is generally arranged on the basis of movement, period, theme, but also gender or ethnic background, where these last two are overtly foregrounded in the poet's work.

## ENG 310 History of Literary Theory and Criticism (7.5 ECTS)

The course aims at introducing students to the history of literary theory and to current debates on the study, interpretation and evaluation of literary texts. Some of the major traditions in literary theory are studied, with particular emphasis on emerging and developing trends, including cognitive literary criticism and the turn to the post-literary. Selected literary texts may be read and debated from different theoretical perspectives.

ENG 330-339 Topics in Theatre: Studies in Shakespeare (7.5 ECTS)

Courses offered in this area concentrate on selected dramatic works of Shakespeare, examining how these
shaped and were shaped by the world of Elizabethan and Jacobean England. While gaining an appreciation of various elements of Shakespearean drama (such as Shakespeare's stage techniques and his use of sources), students will be encouraged to explore the broader social and cultural dimensions of Shakespeare's plays. Students will further be invited to examine the plays from multiple theoretical perspectives, and to analyze texts in relation to a wide range of issues (such as power and authority, gender, sexuality and class).

## ENG 330-339 Topics in Theatre: Studies in Early Modern Drama (7.5 ECTS)

Courses offered in this area concentrate on English drama of the early modern period, exclusive of Shakespeare. Focusing on the reading of selected dramatic texts by some of the major dramatists of this period (such as Christopher Marlowe, Ben Jonson, Thomas Middleton, and John Fletcher), students will be expected to situate early modern drama within a broad set of changes that transformed English culture and society during the sixteenth and seventeenth centuries, such as the Protestant Reformation, the rise of the cities, the growing power of the middle classes, England's attempts at colonization and the emergence of a national identity.

## ENG 330-339 Topics in Theatre: Themes in 18th and 19th

 Century Drama (7.5 ECTS)Courses offered in this area will explore eighteenth and nineteenth century plays in the context of the emergence of the bourgeois and the proletarian public spheres, as these have been theorized by critics such as Peter Szondi, Jürgen Habermas, Oscar Negt, Alexander Kluge, and others. Students will examine a range of generic transformations in the theatre, such as sentimental bourgeois drama, gothic drama, romantic drama, and melodrama. Students will produce critical reports on plays, creative projects, and a final essay.

ENG 330-339 Topics in Theatre: Modern Drama (7.5 ECTS)
Courses offered in this area will focus on major playwrights from the late nineteenth century to the present whose theories and plays have determined the development of modern drama, such as Bertolt Brecht, Antonin Artaud, and Augusto Boal. The development of specific genres, such as realism, epic theatre, and postmodern approaches to the theatre will also be examined. Students will do creative and analytical projects, including critical reports and a final essay.

## ENG 330-339 Topics in Theatre: Anglophone Post - War Drama (7.5 ECTS)

The aim of courses offered in this area is to familiarize students with the diverse field of Anglophone Post-War

Drama. Discussions will focus on some of the most important theatrical movements that developed from 1945 to the present, in most cases in the margins of or against the so-called "commercial" theatre: namely, the theatre of the absurd, the socialist realism of the "angry young men", the happenings of avant-garde theatre, activist theatre, physical theatre, body theatre, and forms of postmodern theatrical production that are based on the use of multimedia, the mixture of different theatrical, literary or artistic genres, improvisation and collective work.

## C) Linguistics Component

## ENG 160 Introduction to Linguistics (5 ECTS)

This course is intended to serve as a foundation course for the study of linguistics. It aims to provide a background in the core areas of linguistics, i.e. phonetics and phonology (sounds and sound patterns), morphology (word structure), syntax (sentence structure) and semantics (the meanings of words). Secondarily, it aims to provide an introduction to interdisciplinary fields of linguistics, such as language in the individual (unique characteristics of human language, language acquisition, language disorders, etc.), the role of language in social organization and language change.

## ENG 161 Language and Mind (5 ECTS)

This course provides an introduction to psycholinguistics and the biological basis for language. It will address some fundamental questions regarding human language, such as how language is (1) represented in our minds, (2) acquired by children, and (3) processed by adults. Ultimately, this course will explore the relationship between language and thought in a biolinguistic setting, from conceptualtheoretical perspectives (what is often called the philosophy of language) as well as experimental-applied perspectives (psycholinguistics at large).

## ENG 240 Pedagogical Grammar (5 ECTS)

The course presents an overview of the grammar of English and focuses on topics in English grammar that are relevant to the EFL teacher. It aims at both improving students' own English usage and analyzing problems in English usage of EFL learners.

## ENG 241 Sociolinguistics (5 ECTS)

The aim of this course is to study language variation within a social context. It shows how sociocultural factors such as social status, occupation, level of education, age, and gender affect linguistic behaviour.

ENG 250-255 Topics in Phonetics and Phonology (5 ECTS)
This group of courses investigates the speech sounds of human languages from an articulatory and an acoustic
point of view as well as the basic notions behind the way in which speech sounds are organized into sound systems of different human languages. At a suprasegmental level, it investigates prosodic systems (syllable structure and stress) of human languages. Whilst it starts off with the fundamental concepts of phonetics and phonology, at the same time, it provides the foundation for more advanced treatments of the above topics through different theoretical frameworks within contemporary phonology.

ENG 256-259 Topics in Semantics and Pragmatics (5 ECTS)
This group of courses investigates meaning in language (semantics) and how language is used for communication (pragmatics). Students are offered the necessary formal tools and analytical methods to examine language meaning, while actual accounts are discussed of various aspects of meaning, such as truth, denotation and reference, predication, and quantification. The group also includes courses introducing students to the ways language in use is studied and how inference and context turn language into a powerful communication tool.

ENG 260-269 Topics in Morphology and Syntax (5 ECTS)
These courses go beyond the introductions to word structure (morphology) and sentence structure (syntax). Emphasis will be placed on (a) practice in analyzing words and sentences and (b) elements of modern morphological and syntactic theories. Morphology courses will investigate methods of morphological research, morphological rules and mechanisms, the relation between morphology and phonology and morphology and syntax, the concepts of word and morpheme, of morphological rule, and the position of morphology in the theory of language. Syntax courses will expand upon the transformational-generative approach to sentence structure, stressing understanding of both theoretical concepts and their explanatory power over empirical data.

ENG 340 Language Change and Development (7.5 ECTS)
This course surveys two different research areas. It investigates language change and how diachronic linguistics proposes to explain it; it also looks into language acquisition and development as well as the factors involved into how humans grow language: a biological capacity for language, general learning mechanisms and the environment. The course further proposes concrete ways to unify the two fields of research, towards explaining linguistic change as something that follows naturally from how language is acquired. The course uses, describes and explains a wealth of empirical evidence, primarily from English.

ENG 341 Psycholinguistics (7.5 ECTS)
This course acquaints students with: (a) the factors that enhance and hamper learning (b) the major theories of learning and their application to language (c) first language acquisition (d) second language learning (e) bilingualism ( f ) cognitive development ( g ) biological foundations of language and (h) zoosemiotics.

## ENG 350 EFL Methodology (7.5 ECTS)

This course is designed to introduce students to different language teaching methods, approaches, techniques and principles as well as to teaching practice. It aims to familiarize students with new developments in language teaching, a wide range of practical teaching ideas reflecting current methodological practice, the role of English as a world language, and the evaluation of new technologies in the classroom. An increased focus will be on teacher development, learner autonomy, contextsensitive teaching, lesson planning, classroom management and language assessment. Students will also become familiar with reflective teaching, classroom and peer observation, self-evaluation and teaching practicum as a means of professional development.

## D) Translation Studies

ENG 170 Introduction to Translation Practice (5 ECTS)
The course is intended to provide a general foundation in translating. Students will be acquainted with the complexity of the task of translation and will be encouraged to discuss problems and possible solutions with the help of translation exercises based on authentic texts of various genres. An additional aim is to familiarize students with the need for in-depth research and the vast research possibilities. At the end of the course, students are expected to have developed an awareness of the background involved in language transfer, as well as a basic ability to handle translation problems at the microstructural level.

## ENG 270 Translation Methodology (5 ECTS)

The aim of this course is to discuss translation as a problem solving activity and as a decision-making process. Focus will be put on the distinction between translation strategies (e.g. foreignization vs domestication) and translation procedures, (methods) as well as on the theoretical and methodological interplay between text and cultural background. Specific attention will be given to terminological issues and to translation problems arising from text-typological specificities (genre, function, cultural specificity). Students are expected to have developed an awareness of what the translation process involves and to have acquired the necessary skills to deal with practical translation problems.

## ENG 280 Translation Theory (5 ECTS)

The aim of this course is to introduce students to the main theoretical approaches to Translation Studies and to examine how the phenomenon of translation has been perceived from classical antiquity to the present. The course will examine the historical, philosophical, social, and cultural context in which translation takes place. Students will develop a broad understanding of translation as an activity that goes beyond language, and which in the 20th century has shaped Translation Studies as an interdisciplinary field of study in its own right, drawing on disciplines such as philosophy and anthropology as well as linguistics and literary theory.

ENG 390-399 Topics in Translation Studies (7.5 ECTS)
These courses will focus on translation as cross-cultural transfer and as inter-semiotic activity, so as to foreground the connection of translation to intercultural studies. The courses will draw on cross-cultural theory, so as to think through the connection or gap between the causation of translation and its reception. This cluster of courses will discuss cultural products and environments as found, for example, in literature, poetry, drama and film, and the transformations and comparative aesthetic and ideological contexts in which transfer circulates.

## ELECTIVE COURSES (7.5 ECTS)

ENG 500-539 Anglophone Literature and Cultural Studies
Representations of Otherness in Early Modern England Early Modern Women and Writing
Literature and Utopia in Early Modern England
Theatre and Cultural Studies of the 18th and 19th century
Romanticism and the Novel
Post-colonial Literature
The Literature of the Uncanny
English Literature and Culture at the Fin-de-Siècle
Seminar in American Studies I
Seminar in American Studies II
Seminar in Comparative Studies I
Seminar in Comparative Studies II
Women Writers and Fantasy
Introduction to Feminist Theory
Black Feminism
Contemporary Antigones: Interfaces Between Theatre and Theoria
Seminar in the Study of Postmodernism

Topics in the History of Literary Genres
Metamorphoses: Narratives and Theories of Becoming in Contemporary Feminism
Studies in the Literary Essay
Studies in Poetry and Poetics
Self, Truth and Language in Modern Autobiographical Texts
Melodrama: Theatre, Cinema, Criticism
Experimental Theatre
Women and World Cinema
Love in the 20th Century
Philosophy and Poetics in European Cinema
Film History and Criticism
Existentialism in Literature and Film
Science Fiction and Philosophy
Posthumanism and Literature
Death in Literature and Philosophy
Independent Study in Literature A
Independent Study in Literature B

ENG 540-569 Theoretical and Applied Linguistics
EFL Methodology II
Issues in Biolinguistics
Pedagogical Phonetics
Grammatical Categories
Trends and Topics in Linguistics
Applied Linguistics
Topics in English Phonology
Topics in English Syntax
Topics in Psycholinguistics and Language Learning
Comparative Syntax
Language Acquisition and Language Disorders
History of English
Teaching English to Children
Historical Linguistics
First Language Acquisition
Second Language Acquisition
Research Methods in Second Language Acquisition Language Typology
The Use of English as an International Language
Language Assessment: Principles and Classroom Practices
EFL Materials Design and Evaluation
Independent Study in Linguistics A
Independent Study in Linguistics B

## ENG 570-599 Translation Studies

Style in Translation
Culture and Translation
LSP and Principles of Terminology
Text Linguistics
Culture and Idioculture in Poetry Translation
Translation Typology and Methodology
Translation Research Methods
New Technologies in Translation
Literary Translation and Comparative Literary Studies
Drama Translation and Comparative Theatre Studies
Semiotic Issues in Translation
Comparative and Intercultural Semiotics
Text and Image in Semiotic Translation
Film and Translation
Translation of Technical and Scientific Texts
Translation of Legal and Economic Texts
Translation of EU Texts
Audiovisual Translation
Principles of Interpreting
Introduction to Intercultural Communication
Gender in Translation
Film Adaptation: Cross Cultural Transfers and Creative
Appropriations
Film as Cultural Translation
Issues in Cultural Translation
An/other Europe in Film and Translation
Independent Study in Translation A
Independent Study in Translation B

Note: The above seminars for each track may vary from year to year, as they are subject to staff availability and overall planning needs.

## STRUCTURE OF THE DEGREE PROGRAMME

| ECTS |  |  |  |  | ECTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1st YEAR |  |  | 4th Semes |  |  |
| 1st Semester |  |  | ANGLOPHONE LITERATURE AND CULTURE |  |  |
| ENG 101 | English for Academic Purposes | 5 | ENG 211-219 | Topics in Fiction | 5 |
| ENG 102 | Research Skills in the Humanities | 5 | ENG 220-229 | Topics in Poetry | 5 |
| ENG 110 | Introduction to the Study of Fiction | 5 | UE 3 | University Elective | 5 |
| ENG 120 | Introduction to the Study of Poetry | 5 | UE 4 | University Elective | 5 |
| ENG 160 | Introduction to Linguistics | 5 | plus 2 out of: | (2X5) | 10 |
| FL1 | Foreign Language | 5 | ENG 241 | Sociolinguistics |  |
| TOTAL |  | 30 | ENG 256-259 | Topics in Semantics \& Pragmatics |  |
| 2nd Semester |  |  | ENG 260-269 | Topics in Morphology \& Syntax |  |
| ENG 103 | Academic Essay Writing | 5 | ENG 280 | Translation Theory |  |
| ENG 130 | Introduction to the Study of Drama | 5 | TOTAL |  | 30 |
| ENG 161 | Language and Mind | 5 | THEORETICAL AND APPLIED LINGUISTICS |  |  |
| ENG 170 | Introduction to Translation Practice | 5 | ENG 241 | Sociolinguistics | 5 |
| FL2 | Foreign Language | 5 | ENG 256-259 | Topics in Semantics | 5 |
| UE 1 | University Elective | 5 | ENG 260-269 | Topics in Morphology \& Syntax | 5 |
| TOTAL |  | 30 | UE 3 | University Elective | 5 |
| YEAR TOTAL |  | 60 | UE 4 | University Elective | 5 |
| 2nd YEAR |  |  | plus 1 out of: |  | 5 |
|  |  |  | ENG 211-219 | Topics in Fiction |  |
| 3rd Semester |  |  | ENG 220-229 | Topics in Poetry |  |
| ANGLOPHONE LITERATURE AND CULTURE |  |  | ENG 280 | Translation Theory |  |
| ENG 211-219 | Topics in Fiction | 5 | TOTAL |  | 30 |
| ENG 220-229 | Topics in Poetry | 5 | TRANSLATIO | N STUDIES |  |
| FL3 | Foreign Language | 5 | ENG 280 | Translation Theory | 5 |
| UE 2 | University Elective | 5 | UE 3 | University Elective | 5 |
| plus 2 out of: | (2X5) | 10 | UE 4 | University Elective | 5 |
| ENG 240 | Pedagogical Grammar |  | plus 3 out of: | (3X5) | 15 |
| ENG 250-255 | Topics in Phonetics \& Phonology of English |  | ENG 211-219 | Topics in Fiction |  |
| ENG 270 | Translation Methodology |  | ENG 220-229 | Topics in Poetry |  |
| TOTAL |  | 30 | ENG 241 | Sociolinguistics |  |
| THEORETICAL \& APPLIED LINGUISTICS |  |  | ENG 256-259 | Topics in Semantics \& Pragmatics |  |
| ENG 240 | Pedagogical Grammar | 5 | ENG 260-269 | Topics in Morphology \& Syntax |  |
| ENG 250-255 | Topics in Phonetics \& Phonology of English | 5 | TOTAL |  | 30 |
| FL 3 | Foreign Language | 5 | YEAR TOTAL |  | 60 |
| UE 2 | University Elective | 5 | 3rd YEAR |  |  |
| plus 2 out of: | (2X5) | 10 | 5th Semes |  |  |
| ENG 211-219 | Topics in Fiction |  | Sth Semes |  |  |
| ENG 220-229 | Topics in Poetry |  | ANGLOPHO | NE LITERATURE AND CULTURE |  |
| ENG 270 | Translation Methodology |  | ENG 330-339 | Topics in Theatre | 7.5 |
| TOTAL |  | 30 | ENG 350 | EFLTeaching Methodology | 7.5 |
| TRANSLATION STUDIES |  |  | ENG 500-539 | Elective LIT | 7.5 |
| ENG 270 | Translation Methodology | 5 | plus 1 out of: |  | 7.5 |
| FL 3 | Foreign Language | 5 | ENG 340 | Language Change \& Development |  |
| UE 2 | University Elective | 5 | ENG 390-399 | Topics in Translation Studies |  |
| plus 3 out of: | (3X5) | 15 | ENG 540-569 | Elective LING |  |
| ENG 211-219 | Topics in Fiction |  | ENG 570-599 | Elective TRA |  |
| ENG 220-229 | Topics in Poetry |  | TOTAL |  | 30 |
| ENG 240 | Pedagogical Grammar |  |  |  |  |
| ENG 250-255 | Topics in Phonetics \& Phonology of English |  |  |  |  |
| TOTAL | 30 | 30 |  |  |  |


| ECTS |  |  |  |  | ECTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| THEORETICAL AND APPLIED LINGUISTICS |  |  | TRANSLATION STUDIES |  |  |
| ENG 340 | Language Change \& Development | 7.5 | ENG 570-599 | Elective TRA | 7.5 |
| ENG 350 | EFL Teaching Methodology | 7.5 | plus 3 out of: | (3X7.5) | 22.5 |
| ENG 540-569 | Elective LING | 7.5 | ENG 310 | History of Literary Theory and Criticism |  |
| plus 1 out of: |  | 7.5 | ENG 330-339 | Topics in Theatre |  |
| ENG 330-339 | Topics in Theatre |  | ENG 341 | Psycholinguistics |  |
| ENG 390-399 | Topics in Translation Studies |  | ENG 500-539 | Elective LIT |  |
| ENG 500-539 | Elective LIT |  | ENG 540-569 | Elective LING |  |
| ENG 570-599 | Elective TRA |  | TOTAL |  | 30 |
| TOTAL |  | 30 | YEAR TOTAL |  | 60 |
| TRANSLATION STUDIES |  |  | 4th YEAR |  |  |
| ENG 350 | EFL Teaching Methodology | 7.5 | 7th Semester |  |  |
| ENG 390-399 | Topics in Translation Studies | 7.5 |  |  |  |
| ENG 570-599 | Elective TRA | 7.5 | ANGLOPHONE LITERATURE AND CULTURE |  |  |
| plus 1 out of: |  | 7.5 | ENG 500-539 | Elective LIT | 7.5 |
| ENG 330-339 | Topics in Theatre |  | ENG 500-539 | Elective LIT | 7.5 |
| ENG 340 | Language Change \& Development |  | ENG 500-539 | Elective LIT | 7.5 |
| ENG 500-539 | Elective LIT |  | plus 1 out of: |  | 7.5 |
| ENG 540-569 | Elective LING |  | ENG 410 | Thesis |  |
| TOTAL |  | 30 | ENG 500-539 | Elective LIT |  |
| 6th Semester |  |  | ENG 540-569 | Elective LING |  |
| ANGLOPHONE LITERATURE AND CULTURE |  |  | ENG 570-599 | Elective TRA |  |
| ENG 310 | History of Literary Theory and Criticism | 7.5 | THEORETICAL AND APPLIED LINGUISTICS |  |  |
| ENG 330-339 | Topics in Theatre | 7.5 |  |  |  |
| ENG 500-539 | Elective LIT | 7.5 | ENG 540-569 | Elective LING | 7.5 7.5 |
| plus 1 out of: |  | 7.5 | ENG 540-569 | Elective LING | 7.5 |
| ENG 341 | Psycholinguistics |  | plus 1 out of: |  | 7.5 |
| ENG 540-569 | Elective LING |  | ENG 440 | Thesis |  |
| ENG 570-599 | Elective TRA |  | ENG 500-539 | Elective LIT |  |
| TOTAL |  | 30 | ENG 540-569 | Elective LING |  |
| THEORETICAL \& APPLIED LINGUISTICS |  |  | ENG 570-599 | Elective TRA |  |
| ENG 341 | Psycholinguistics | 7.5 | TOTAL |  | 30 |
| ENG 540-569 | Elective LING | 7.5 | TRANSLATION STUDIES |  |  |
| plus 2 out of: | (2X7.5) | 15 | ENG 570-599 | Elective TRA | 7.5 |
| ENG 310 | History of Literary Theory and Criticism |  | ENG 570-599 | Elective TRA | 7.5 |
| ENG 330-339 | Topics in Theatre |  | ENG 570-599 | Elective TRA | 7.5 |
| ENG 500-539 | Elective LIT |  | plus 1 out of: |  | 7.5 |
| ENG 570-599 | Elective TRA | 30 | ENG 470 | Thesis |  |
| TOTAL |  |  | ENG 500-539 | Elective LIT |  |
|  |  |  | ENG 540-569 | Elective LING |  |
|  |  |  | ENG 570-599 | Elective TRA |  |
|  |  |  | TOTAL |  | 30 |

## STRUCTURE OF THE DEGREE PROGRAMME (continued)

8th Semester
ANGLOPHONE LITERATURE AND CULTURE
ENG 500-539 Elective LIT ..... 7.5
ENG 500-539 Elective LIT ..... 7.5
ENG 500-539 Elective LIT ..... 7.5
plus 1 out of: ..... 7.5
ENG 420 ThesisENG 500-539 Elective LITENG 540-569 Elective LING
ENG 570-599 Elective TRA
TOTAL30
THEORETICAL AND APPLIED LINGUISTICS
ENG 540-569 Elective LING ..... 7.5
ENG 540-569 Elective LING ..... 7.5
ENG 540-569 Elective LING ..... 7.5
plus 1 out of: ..... 7.5ENG 450 ThesisENG 500-539 Elective LITENG 540-569 Elective LINGENG 570-599 Elective TRATOTAL30
TRANSLATION STUDIES
ENG 570-599 Elective TRA ..... 7.5
ENG 570-599 Elective TRA ..... 7.5
ENG 570-599 Elective TRA ..... 7.5
plus 1 out of: ..... 7.5
ENG 480 ThesisENG 500-539 Elective LITENG 540-569 Elective LING
ENG 570-599 Elective TRA
TOTAL ..... 30
YEAR TOTAL ..... 60
GRAND TOTAL ..... 240

## INTERDISCIPLINARY B.A. PROGRAMME IN MODERN LANGUAGES AND EUROPEAN STUDIES

The Department of English Studies participates in the interdisciplinary programme in Modern Languages and European Studies, hosted by the Department of French Studies and Modern Languages. For further information please refer to the Department of French and European Studies.

## Compulsory Courses

## First Year

## Fall Semester

ENG 101 Academic Communication in English

## Spring Semester

ENG 103 Academic Essay Writing

## Second Year

## Fall Semester

ENG 239 Introduction to Cultural Criticism
ENG 279 Introduction to Critical Thinking

## Spring Semester

ENG 249 Frontiers of/in Europe

## Elective Courses

ENG 501 Literature and the Art of Living
ENG 502 Literature and Utopia in Early Modern England
ENG 503 Narratives of Home and Homelessness in Europe
ENG 506 European Modern Drama
ENG 532 The Literature of the Uncanny
ENG 552 Language Contact in Europe
ENG 554 Language and Gender
ENG 588 Translation, Poetics, Film
ENG 508 Philosophy and Poetics in European Cinema
ENG 578 Gender in Translation
ENG 582 Film Adaptation, Cross Cultural Transfers and Creative Appropriations
ENG 513 Existentialism in Literature and Film
ENG 507 Women and World Cinema
ENG 509 Film History and Criticism
ENG 522 Film as Cultural Translation
ENG 530 Love in the 20th Century
ENG 595 An/other Europe in Film and Translation
ENG 592 Issues in Cultural Translation
ENG 590 Translating for the EU Institutions
ENG 539 Key Issues in Aesthetics

## COURSE DESCRIPTIONS

ENG 239 Introduction to Cultural Criticism (5 ECTS)
The course will familiarize students with the methodological and theoretical concerns involved in the comparative study and analysis of culture(s). Particular emphasis will be given to the main debates surrounding the concept of culture and its historical development, the distinction between "high culture" and "popular culture," the class, race and gender politics of canonicity, the epistemological and ethical stakes entailed in any attempt to understand other cultures and unfamiliar forms of cultural production. A broad range of activities and objects will be analysed in relation to historical or geographical mappings, political and economic contexts, official and marginal discourses.

ENG 249 Frontiers of/in Europe (5 ECTS)
This course examines the notion of frontiers and their significance for the meaning of Europe using texts from Philosophy, Literature, History, Cultural Criticism and Cinema. Thematically the course is divided in three sections. The first focuses on the notion of spatial frontiers through an examination of European Expansionism. The second examines thought-frontiers through a close reading of Hannah Arendt's Eichmann in Jerusalem: A Report on the Banality of Evil. And finally, the third section focuses on Frontier Shifting and Otherness through an examination of Europe's relationship with its Others within and without.

ENG 279 Introduction to Critical Thinking (5 ECTS)
This course aims at helping students acquire the analytic, critical and reflective skills necessary for their development as discriminating readers and effective writers. Through the careful analysis of a wide range of texts (journalistic, scientific, philosophical, literary) and cultural artefacts (photographs, videos, films, artworks), the students will learn the basics of inductive and deductive reasoning and will develop the ability to select and evaluate information, analyse genre, style and tone, interpret and engage with ideas, draw informed conclusions and formulate persuasive arguments.

## FACULTY OF HUMANITIES



## DEPARTMENT OF FRENCH AND EUROPEAN STUDIES

The Department of French and European Studies is offering (through admission by the same entrance examinations) two undergraduate degrees:

- French Language and Literature
- Modern Languages and European Studies

These two undergraduate degrees offer contemporary education and training. Students who successfully complete the programme may pursue a career in Cyprus or abroad, not only as teachers and/or ambassadors of French language and Civilization, but as European citizens as well (fluent in three or four languages, Greek, English, French and/or German). The new structure of the B.A. consists of two different tracks with common courses.

CHAIRPERSON
Fryni Kakoyianni - Doa
VICE-CHAIRPERSON
Panagiotis Christias

## PROFESSORS

Fabienne H. Baider
May Chehab
Yiannis loannou
ASSOCIATE PROFESSORS
Panagiotis Christias
Fryni Kakoyianni - Doa
LECTURER
Christakis Christofi

## A. DEGREE IN FRENCH LANGUAGE AND LITERATURE

This area of specialization, French Language and Literature gives the opportunity to students to develop advanced communication skills in the French language and to engage in depth with French linguistics and culture, arts and cinema. Students who successfully complete the programme may pursue a career in teaching, journalism, public service and professional translation. As it happens with other degrees too, the degree in French Language and Literature may open new horizons for a successful professional career.

## Degree in French Language and Literature Requirements

In order to obtain the Degree in French Language and Literature, students must take and successfully complete the courses corresponding to a minimum of 240 ECTS.
These courses include: 1) compulsory courses, 2) foreign language courses and 3) elective courses.

## Compulsory Courses

FES 102 Oral Discourse I
FES 103 Written Discourse I
FES 104 Written Discourse II
FES 112 Introduction to the French-speaking World
FES 113 Introduction to the European World
FES 131 Contemporary French Society
FES 171 Introduction to Research Tools
FES 202 French for Academic Purposes I
FES 203 French for Academic Purposes II
FES 204 Oral Discourse II. Phonetics
FES 220 Francophone Cyber-Cultures
FES 222 Popular Cultures \& French as Foreign Language
FES 361 Translation Theories
FES 362 Translation Practices
FES 370 Research Methodology
FES 373 Professional Communication / Communication in Workplace
FES 375 French in Europe
FES 404 French for Academic Purposes III
FES 430-439 Two Courses of the thematic area Cinema Visual Arts - Communication.
FES 100-499 Two Courses of the thematic area Didactics
FES 472 Final Undergraduate Thesis (with a prerequisite of 180 ECTS ) and WAM of 7
ENG 101 Academic Communication in English
This list is enriched with additional compulsory courses such as French Literature, Linguistics, as well as courses focusing on European Thought and European Culture and

Visual Arts. They are announced with their codes at the beginning of each semester.

## Additional Compulsory Courses (examples)

FES 100 Introduction à la Linguistique
FES 105 De la Grammaire à la Linguistique I
FES 106 De la Grammaire à la Linguistique II
FES 132 Histoire de la Civilisation Française
FES 134 Principles of Contemporary Teaching of French as Foreign Language
FES 140 Histoire de la Littérature Française
FES 200 Morphosyntaxe
FES 201 Syntaxe
FES 230 La France du XXe siècle
FES 233 Cartographies
FES 234 L'Europe dans les Medias Francais: Idéologies et Discours Politiques
FES 239 The Legacy of French Revolution
FES 240 Littérature Moderne (1870-1945)
FES 241 Littérature Contemporaine (1945-)
FES 242 Littérature Baroque et Classique
FES 244 Neology and Vocabulary Renewal
FES 245 Rhétorique de la Publicité
FES 246 Littérature et Bande Dessinée
FES 265 Théâtre Européen, Moderne et Postmoderne
FES 282 La bataille des langues en Europe
FES 290 Introduction to European Literature
FES 300 Lexicologie - Lexicographie
FES 301 Sociolinguistique
FES 302 Analyse Linguistique du Texte
FES 303 Phonologie
FES 306 Linguistique Générale
FES 309 Histoire de la Linguistique
FES 310 Langue, Histoire et Société
FES 325 European Literatures
FES 330 The European Integration (Jean Monnet Module)
FES 338 Europe and Liberalism
FES 340 Littérature du XIXe siècle
FES 342 Littérature de la Renaissance
FES 343 Littérature du XVIIIe siècle
FES 347 La France devant les grands Défis de I' UE
FES 350 Littérature Comparée
FES 360 Didactique du FLE
FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment
FES 392 The Archipelago of European Thinking
FES 396 La France de Ille République face I' Allemagne
FES 411 Discourses, Society, and Ideology: the French Media

FES 420 Discourse in the framework of European Enlightenment
FES 425 Economy as Bio-politics in Foucault FES 428 Introduction to Theories of Beauty

FES 430 The European Film Tradition
FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films FES 432 La Condition Humaine dans la Culture de XXe s.
FES 433 Transformations du Texte Littéraire
FES 439 Littérature et Peinture
FES 444 Introduction to the Theory of "Sublime"
FES 483 European Art and Greek Mythology

## Foreign Languages Courses

Three levels of the same foreign language (the Department recommends French), offered by the Language Centre, total credit: 15 ECTS.

## Elective Courses

Any course within the University, except courses of the Department of French and European Studies, is considered an optional course. At least 16 ECTS must be chosen from three different faculties of the University. Courses offered by the Language Centre and the Sports Centre are considered as courses provided by independent faculties.

In all semesters, summer semester included, students also have the opportunity to enrol once in the courses FES 150 Independent study (3ECTS) and FES 250 Research Experience ( 6 ECTS). The registration depends on the approval of the supervising professor.

According to the Senate decision (no. 2/2006, § 3.9.2.1), all students who voluntarily attend public lectures, workshops and conferences, organized by the University's Departments or the Centre for Teaching and Learning (20 hours of intensive courses $=1 \mathrm{ECTS}$ ), may be credited with 2 ECTS during the four years of their studies. The Department recommends that all first year students get the Bulletin from the Academic Affairs and Student Welfare Service.

## Minor Degree

In conjunction with their undergraduate programme in French Language and Literature, students may also enrol in a minor programme in European Studies. In addition to the courses common to both tracks which are recognized by the Departmental Board upon a simple request, they must pass five more courses: 2 FES, 1 SPS, 1 HIST and 1 LAW.

## B. DEGREE IN MODERN LANGUAGES AND EUROPEAN STUDIES

Students of the Modern Languages and European Studies track will be given the opportunity to develop advanced skills in French and/or English and/or German language and to engage in depth with European Thought and European Cultural and Film Studies. They will have a sound background in Human Sciences and Social and Political Sciences, with emphasis on European Studies' matters. They will be able to pursue a career in professional fields where this kind of specialization is necessary, such as the EU institutions and services, Public and Foreign Service, cultural organizations, foundations, enterprises, NGOs, etc.

## Degree in Modern Languages and European Studies Requirements

In order to obtain the degree in Modern Languages and European Studies, students must take and successfully complete the courses corresponding to a minimum of 240 ECTS. These courses include: 1) compulsory courses, taught in the two languages the student has chosen, 2) courses provided by the Departments of English Studies, History and Archaeology, Social \& Political Sciences, Law, and the Language Centre and 3) elective courses.

## ENGLISH-FRENCH COMBINATION

## Compulsory Courses

FES 102 Oral Discourse I
FES 103 Written Discourse I
FES 104 Written Discourse II
FES 112 Introduction to the French-speaking world
FES 113 Introduction to the European World
FES 131 Contemporary French Society
FES 171 Introduction to Research Tools
FES 202 French for Academic Purposes I
FES 203 French for Academic Purposes II
FES 204 Oral Discourse II. Phonetics
FES 220 Francophone Cyber-Cultures
FES 222 Popular Cultures \& French as Foreign Language
FES 361 Translation Theories
FES 362 Translation Practices
FES 370 Research Methodology
FES 373 Professional Communication / Communication in Workplace
FES 375 French in Europe
FES 404 French for Academic Purposes III
FES 430-439 Two courses of the thematic area Cinema Visual Arts - Communication.
FES 475 Final Undergraduate Thesis or two FES courses (with a prerequisite of 180 ECTS) and WAM of 7

This list is enriched with additional compulsory courses focusing on European Thought and European Culture and Visual Arts. They are announced with their codes at the beginning of each semester.

## Additional Compulsory Courses (Indicative Courses)

FES 233 Cartographies
FES 234 Europe in French media: Ideologies and Political Speech
FES 244 Neology and Vocabulary Renewal
FES 245 The Rhetorics of Advertising
FES 246 Littérature et Bande Dessinée
FES 265 Théâtre Européen, Moderne et Postmoderne
FES 282 La Bataille des Langues en Europe
FES 290 Introduction to European Literature
FES 306 Linguistique Générale
FES 309 Histoire de la Linguistique
FES 310 Langue, Histoire et Société
FES 325 European Literatures
FES 330 The European Integration (Jean Monnet Module)
FES 338 Europe and Liberalism
FES 347 La France devant les grands Défis de I' UE
FES 350 Littérature Comparée
FES 364 Europe - Mosaic of Languages
FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment
FES 392 The Archipelago of European Thinking
FES 393 Love and Politics
FES 396 La France de Ille République face I' Allemagne
FES 411 Discourses, Society, and Ideology:The French Media
FES 420 Discourse in the framework of European Enlightenment
FES 425 Economy as Bio-politics in Foucault
FES 428 Introduction to Theories of Beauty
FES 430 The European Film Tradition
FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films
FES 432 La Condition Humaine dans la Culture de XXe s.
FES 433 Transformations du Texte Littéraire
FES 439 Littérature et Peinture
FES 442 Philosophy of Money
FES 444 Introduction to the Theory of "Sublime"
FES 483 European Art and Greek Mythology
Courses provided by the Departments of English Studies, History and Archaeology, Social \& Political Sciences, Law, and Language Centre (cf. the descriptions provided by each Department on their respective site).
ENG 101 Academic Communication in English
ENG 103 Academic Essay Writing

ENG 239 Introduction to Cultural Criticism
ENG 249 Frontiers of/in Europe
ENG 279 Introduction to Critical Thinking
LAN 203 English for European and International Relations 2 HIST Courses (announced at the beginning of each semester)
2 SPS Courses (SPS 251 and SPS 266)
2 LAW Courses (announced at the beginning of each semester)

In all semesters, summer semester included, students also have the opportunity to enrol once in the courses FES 150 Independent study (3ECTS) and FES 250 Research Experience ( 6 ECTS). The registration depends on the approval of the supervising professor.
According to the Senate decision (no. 2/2006, § 3.9.2.1), all students who voluntarily attend public lectures, workshops and conferences, organized by the University's Departments or the Centre for Teaching and Learning (20 hours of intensive courses = 1 ECTS), may be credited with 2 ECTS during the four years of their studies. The Department recommends that all first year students get the Bulletin from the Academic Affairs and Student Welfare Service.

## Minor Degree

In conjunction with the undergraduate programme in European Studies, students may also enrol in a minor programme in French Language and Literature. In addition to the courses common to both tracks which are re-cognized by the Departmental Board upon a simple request, they must pass 5 more FES courses taught in French language.

## FRENCH-GERMAN COMBINATION

## Compulsory Courses

FES 102 Oral Discourse I
FES 103 Written Discourse I
FES 104 Written Discourse II
FES 109 Schriftliche Ausdruckstechniken (Written Expression Techniques)
FES 112 Introduction to the French-speaking World
FES 113 Introduction to the European World
FES 131 Contemporary French Society
FES 171 Introduction to Research Tools
FES 180 Academic German I
FES 181 Deutsch in der Sozialwissenschaft (German in Social Sciences)
FES 202 French for Academic Purposes I
FES 203 French for Academic Purposes II

FES 204 Oral Discourse II. Phonetics
FES 220 Francophone Cyber-Cultures
FES 222 Popular Cultures \& French as Foreign Language
FES 280 Academic German II
FES 361 Translation Theories
FES 362 Translation Practices
FES 370 Research Methodology
FES 373 Professional Communication/Communication in Workplace
FES 375 French in Europe
FES 376 Deutsch für Europäische Beziehungen (German for European Relations)
FES 404 French for Academic Purposes III
FES 430-439 Two Courses of the thematic area Cinema Visual Arts - Communication.
FES 475 Final Undergraduate Thesis or two FES courses (with a prerequisite of 180 ECTS) and WAM of 7

This list is enriched with additional compulsory courses focusing on European Thought and European Culture and Visual Arts. They are announced with their codes at the beginning of each semester.

## Additional Compulsory Courses (Indicative Courses)

FES 233 Cartographies
FES 234 Europe in French medi : Ideologies and political speech
FES 244 Neology and Vocabulary Renewal
FES 245 The Rhetorics of Advertising
FES 246 Littérature et Bande Dessinée
FES 265 Théâtre Européen, Moderne et Postmoderne
FES 282 La Bataille des Langues en Europe
FES 290 Introduction to European Literature
FES 306 Linguistique Générale
FES 309 Histoire de la Linguistique
FES 310 Langue, Histoire et Société
FES 325 European Literatures
FES 330 The European Integration (Jean Monnet Module)
FES 338 Europe and Liberalism
FES 347 La France devant les grands Défis I' UE
FES 350 Littérature Comparée
FES 364 Europe - Mosaic of Languages
FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment
FES 392 The Archipelago of European Thinking

FES 393 Love and Politics
FES 396 La France de Ille République Face I' Allemagne
FES 411 Discourses, Society, and Ideology:The French Media
FES 420 Discourse in the framework of European Enlightenment
FES 425 Economy as Bio-politics in Foucault
FES 428 Introduction to Theories of Beauty
FES 430 The European Film Tradition
FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films
FES 432 La Condition Humaine dans la Culture du XXe s.
FES 433 Tranformations du Texte Littéraire
FES 439 Littérature et Peinture
FES 442 Philosophy of Money
FES 444 Introduction to the Theory of "Sublime" FES 483 European Art and Greek Mythology

Courses provided by the Departments of History and Archaeology, Social \& Political Sciences, and Law:
2 HIST Courses (announced at the beginning of each semester)
2 SPS Courses (SPS 251 and SPS 266)
2 LAW Courses (announced at the beginning of each semester)

In all semesters, summer semester included, students also have the opportunity to enrol once in FES 150 Independent study (3 ECTS) and FES 250 Research Experience (6 ECTS). The registration depends on the approval of the supervising professor.

According to the Senate decision (no. 2/2006, § 3.9.2.1), all students who voluntarily attend public lectures, workshops and conferences, organized by the University's Departments or the Centre for Teaching and Learning (20 hours of intensive courses=1 ECTS), may be credited with 2 ECTS during the four years of their studies. The Department recommends that all first year students get the Bulletin from the Academic Affairs and Student Welfare Service.

## Minor Degree

In conjunction with the undergraduate programme in European Studies, students may also enrol in a minor programme in French Language and Literature. In addition to the courses common to both tracks, which are recognized by the Departmental Board upon students' request, students must pass 5 more FES courses taught in French language.

## ENGLISH-GERMAN COMBINATION

## Compulsory Courses

FES 109 Schriftliche Ausdruckstechniken (Written Expression Techniques)
FES 120 Deutsche Kultur (German culture)
FES 121 Mündliche Sprachproduktion (Oral Discourse Production)
FES 122 Schriftliche Sprachproduktion (Written Discourse Production/Writing Skills)
FES 171 Introduction to Research Tools
FES 180 Deutsch für Akademiker I (Academic German I)
FES 181 Deutsch in der Sozialwissenschaft (German in Social Sciences)
FES 182 Deutsche Populärkultur und Deutsch als Fremdsprache (German Popular Culture and German as Foreign Language)
FES 280 Deutsch für Akademiker II (Academic German II)
FES 370 Research Methodology
FES 374 Fachsprache für den Beruf (Professional Communication)
FES 376 Deutsch für Europäische Beziehungen (German for European Relations)
FES 380 Deutsch für Akademiker III (Academic German III)
FES 381 Deutsch für Akademiker IV (Academic German IV)
FES 475 Final Undergraduate Thesis or two FES courses (with a prerequisite of 180 ECTS) and WAM of 7

This list is enriched with additional compulsory courses focusing on European Thought and European Culture and Visual Arts. They are announced with their codes at the beginning of each semester.

## Additional Compulsory Courses (examples)

FES 234 Europe in French media: ideologies and political speech
FES 244 Neology and Vocabulary Renewal
FES 245 The Rhetorics of Advertising
FES 282 La Bataille des Langues en Europe
FES 290 Introduction to European Literature
FES 310 Langue, histoire et société
FES 325 European Literatures
FES 330 The European Integration (Jean Monnet Module)
FES 350 Littérature comparée
FES 364 Europe - Mosaic of Languages
FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment
FES 392 The Archipelago of European Thinking
FES 393 Love and Politics
FES 411 Discourses, Society, and Ideology:The French Media

FES 420 Discourse in the framework of European Enlightenment
FES 425 Economy as Bio-politics in Foucault
FES 428 Introduction to Theories of Beauty
FES 430 The European Film Tradition
FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films FES 442 Philosophy of Money
FES 444 Introduction to the Theory of "Sublime" FES 483 European Art and Greek Mythology

Courses provided by the Departments of English Studies, History and Archaeology, Social \& Political Sciences, Law, and the Language Centre (cf. the descriptions provided by each Department on their respective site)

ENG 101 Academic Communication in English
ENG 103 Academic Essay Writing
ENG 239 Introduction to Cultural Criticism
ENG 249 Frontiers of/in Europe
ENG 279 Introduction to Critical Thinking
ENG 500 Elective Course of the thematic area Cinema
ENG 500 Elective Course of the thematic Translation Studies
ENG 590 Translating for the European Union Institutions LAN 202 Public Speaking
LAN 203 English for European and International Relations 2 HIST Courses (announced at the beginning of each semester)
2 SPS Courses (SPS 251 and SPS 266)
2 LAW Courses (announced at the beginning of each semester)

In all semesters, summer semester included, students also have the opportunity to enrol once in the courses FES 150 Independent study (3 ECTS) and FES 250 Research Experience ( 6 ECTS). The registration depends on the approval of the supervising professor.

According to the Senate decision (no. 2/2006, § 3.9.2.1), all students who voluntarily attend public lectures, workshops and conferences, organized by the University's Departments or the Centre for Teaching and Learning (20 hours of intensive courses=1 ECTS), may be credited with 2 ECTS during the four years of their studies. The Department recommends that all first year students get the Bulletin from the Academic Affairs and Student Welfare Service.

NB: students of the language combination German-English do not have the opportunity to enrol in a minor programme in French Language and Literature.

## DESCRIPTION OF COURSES

## A. Compulsory Courses

FES 102 Oral Discourse I
This course aims at helping students to develop skills for understanding and speaking in French. In particular, students are familiarized with the different ways of expressing themselves as well as communicating in various types of communication circumstances (speech, dialogue, discussion, activities in the context of research, etc.). Furthermore, the course aims at helping students to develop techniques of listening, understanding and structuring meaning, through authentic listening and audio-visual material, and to develop multiple skills in speaking. The students learn: 1) how to explain the content of an audio file or a video, 2) how to speak, presenting and supporting their point of view with arguments, 3) how to apply language skills to diverse social situations, 4) how to prepare an oral presentation.

## FES 103 Written Discourse I

This course presents an overview of French grammar. Through understanding of authentic texts, the basic grammatical structures as well as their components are examined (voices, moods, tenses, inflection, etc.). Students undertake short assignments, individually or in groups, in order to improve their skills in written discourse, focusing on grammar and spelling. The course aims at identifying students' difficulties in French grammar and at the same time, strengthening their written skills.

## FES 104 Written Discourse I

This course is the continuation of the course FES 103. Therefore, students must be familiar with the simple structures of written French. Based on the understanding of authentic documents, the course focuses on more complex structures (such as embedded clauses). Upon completion of this course, students should be able to produce sentences expressing causality, purpose, time, etc. Students prepare individual and/or team assignments, in order to improve their skills in written discourse, the emphasis being on grammar and spelling. The course aims at helping students to engage in depth with French grammar, identify their particular difficulties in grammar skills and apply rules in written discourse.

## FES 109 Schriftliche Ausdruckstechniken (Written Expression Techniques)

This course is taught in German language. In this course, students will be introduced to various types of texts (literary, journalistic, historical texts, etc.). The students will learn how to approach these texts in an academic way in order to be able to reflect and reproduce their contents. This can be done in the form of a summary, a report or an essay.

FES 112 Introduction to the French Speaking World
This course, which addresses new students, presents firstly, the French-speaking world, and later on the contemporary French society. The students have the opportunity to learn about French customs, to better understand the current trends of French society and of the French speaking community. In particular, the course focuses on four fields, as regards the French-speaking world: 1) history and evolution of the French-speaking world, 2) customs, 3) arts and 4) the influence of French language and culture on Cyprus.

## FES 113 Introduction to the European world

The course aims at providing new students with introductory knowledge about the cultural reality of a changing Europe. In this framework, the course presents and analyses issues regarding culture and evolution of Europe (languages, religions, population, arts, multilingualism, education, institutions, etc.).

## FES 121 Mündliche Sprachproduktion <br> (Oral Discourse Production)

This course aims at helping students acquire the necessary skills for oral communication in German. Various methods of instruction will help students to improve their oral communication skills as well as their auditory skills. Students will learn how to take part in discussions about a variety of topics related to culture, politics and society. With the help of practical language exercises, students will learn how to a) discuss and exchange arguments b) draw conclusions and c) summarize discussions.

## FES 122 Schriftliche Sprachproduktion (Writing Skills)

In this course, students will practise and improve their writing skills in German. With the help of various methods of instruction, students will acquire important linguistic means for the written language. A variety of writing exercises will help to practise and foster the knowledge of these means. Furthermore, the students will acquire basic knowledge in academic writing and official written communication.

## FES 131 Contemporary French Society

This course presents a general picture of the French society transformation since World War II. The economic, political and social mutation of French society since 1945 will be examined and analysed based on various documents (texts, pictures, audiovisuals, etc.). The course aims at helping students to better understand the current trends of French society, as well as improve their knowledge in French. Upon completion of this course, students will have improved their knowledge of spoken and written French. Students will be able to 1) understand and explain a statement, as well as communicate its main meaning, 2) present and comment a newspaper article, 3)
explain some historical facts, which have been examined in the course. Students will be able to understand the general transformation of the country to a modern society and connect political events with social movements, arts and ideas.

## FES 171 Introduction to Research Tools

The course teaches students the basic knowledge of information technology, which is essential to carry on studies in the Humanities. It introduces tools used for carrying out bibliographic research (such as software and search engines or library search techniques). It also teaches students to collect, exploit and present the data they have found, providing advanced knowledge of office software. Furthermore, it introduces students to the computer networks and e-services available at the University, the internet browsers and presents the use and management of multimedia files and software. Upon completion of this course, students will be able to carry on simple bibliographic research, use word processors and audio software, as well as familiarize themselves with the basic rules of Internet browsing for academic research.

## FES 180 Deutsch für Akademiker I

(German for Academic Purposes I)
This course is taught in German language and it focuses on: 1) extending further knowledge of German morphology and syntax, 2) developing their ability to produce grammatically correct and well-structured sentences and 3) the introduction of more complex language structures and syntax problems (especially as regards the word order, verbal groups, choice of prepositions). Upon completion of the course, students will have mastered German spelling and important grammatical structures. They will pass from the sentence syntax to the construction of meaning and they will make use of the strategies and the tools that are necessary for the production of more complex texts.

## FES 181 Deutsch in der Sozialwissenschaft

(German for Social Studies)
This course provides students with fundamental knowledge of academic work in German contexts. Therefore, basic elements of the German academic culture will be explained and explored. The course emphasizes two topics: 1) philological working skills and 2) German as a foreign language in the academic field. Topic 1 will comprise essential academic working skills such as writing a bibliography, working with libraries and databases, literature search as well as formal aspects of written work and oral presentations. Topic 2 will deal with German as an academic language. With the help of practical language exercises, students will be introduced to German writing in an academic context.

FES 182 Deutsche Populärkultur und Deutsch als Fremdsprache (German Popular Culture and German as a Foreign Language)
The purpose of this course is to provide students with knowledge of regional and cultural topics in Germany, Switzerland and Austria. Furthermore, students will improve their knowledge of the German language. With the help of various media (press, television, internet) a variety of topics will be introduced and emphasized. Students will gain an overview of German popular culture, as well as reflecting on different aspects of their own culture. Additionally, students will learn to express themselves and their views on these topics orally and in writing.

## FES 202 French for Academic Purposes I

The course gradually introduces students to the production of a structured work at the level of an academic essay. The course focuses on the identification of the structure organizing a text and the production of a coherent text, syntactically and grammatically correct. The course furthers the students' language skills: 1) understanding of academic texts as well as explanation and presentation of a textual context, 2) capacity of commenting such texts, 3) capacity of writing in a cohesive way an essay with paragraphs, introduction, linking words and conclusions in the framework of academic content.

## FES 203 French for Academic Purposes II

This course is the continuation of the course FES 202, focusing on the production of academic French. It presents the reading methodology for texts, how to identify basic ideas and their logical articulation, as well as how to summarize and re-formulate the information provided. The course aims at developing students' comprehension and production skills in written and spoken French. Through consecutive activities, students will be able to identify the main ideas of the text, reformulate them in a cohesive manner and articulate them, using logical links.

## FES 204 Oral Discourse II. Phonetics

Based on the techniques and knowledge learnt in the course FES 102, comprehension skills are further developed, as well as production of spoken French in various social environments (continuous speech, dialogue, debates, conversations, etc.). The course aims at improving students' pronunciation by emphasizing on rhythm, intonation, and other phonological phenomena. The course also introduces the IPA (International Phonetic Alphabet). The course aims at helping students to interact with a certain degree of comfort, spontaneity and control of their vocal ability, allowing normal interaction with francophone speakers. Students should be able to take
active part in a discussion in familiar environment, explaining and supporting their point of view.

## FES 220 Francophone Cyber-Cultures

The course focuses on acquiring knowledge on information and communication technologies (ICT), as taught in the e-French class. The course consists of activities that will help the students to familiarize themselves with French language structure that they have already acquired, in both written and oral discourse. Using French-speaking audiovisuals available on the Internet, students will participate in discussions on online forums, responding to existing information and seeking for new. The course is therefore based on collaborative learning, students being actors in the training process through the interactive discussion, as a result of their interaction and the feedback they get. The course aims at developing the students' skills in written and oral discourse through the use of synchronous and asynchronous communication tools. These tools allow interactive discussions between the learners, engaging them in a community with common learning objectives. Students are guided to become independent learners.

## FES 222 Popular Cultures and French as a Foreign Language

Popular culture is considered a privileged field of familiarization with current presentation where students can discover different ways of life and different values. The course adopts an intercultural approach and introduces the 21st century French society, mainly through music, cultural media (such as TV, radio, internet) and in the framework of the progressive globalization. The course also provides a space for reflecting on various aspects of the students' own cultures. By using various cultural artefacts (audiovisuals, texts, etc.) students will learn to understand, contextualize and interpret aspects of popular culture in the current French-speaking world.

## FES 280 Deutsch für Akademiker II

(German for Academic Purposes II)
This course is taught in German language and focuses on familiarization with text cohesion elements and the ability to write cohesive paragraphs. Students are given the opportunity to practise in writing and re-writing, and, in particular, improve their skills in formulating paragraphs, introductions, transitions and conclusions of complex comments and essays. At the end of the semester, students will have acquired the expressions stating cause or effect, intention and opposition or concession. They will also be able to formulate in a cohesive manner paragraphs, transitions and conclusions.

FES 361 Translation Theories
This course presents a brief history of translational considerations (prescriptive, descriptive and prospective theories) and some contemporary approaches, such as those proposed by Jakobson, W. Benjamin, Blanchot, G. Mounin, J.-R. Ladmiral, G. Steiner, R. Amossy, A. Berman, H. Meschonnic, P. Ricoeur, U. Eco, etc. It then provides students with some common places about the process of translation (concepts of fidelity, readability and transparency, the Babel Myth, the hermeneutic approach to translation, etc.). Finally, it recommends to the students, on an indicative basis, to study texts of general content. The course aims at presenting some important aspects of the phenomenon of translation, questioning certain stereotypes regarding translation (such as translation as "automated" or "secondary" procedure), while providing students with theoretical insights that will help them move on to the practice of translation.

## FES 362 Translation Practices

This course aims at establishing, through a number of translation exercises (from French into the mother tongue and vice versa), a typology of the most dominant errors and problems that may arise through the process of translation in the French-Greek language pair. It consists mainly of practical exercises on a selection of literary (prose and poetry) and non-literary texts (medicine, computer science, biology, anthropology, archaeology, as well as advertising and journalistic texts). It investigates specific issues: translation of metaphors, neologisms and/or terminology. Its objective is to increase students' awareness on the mechanisms and pitfalls being involved in the act of translating from one language-culture into another (automatisms, interactions, cultural codes, etc.).

## FES 370 Research Methodology

This course includes three units: Theoretical, Heuristic and Technical. Theoretical: a positive heuristic; a negative heuristic; blind search; the corpus as a heuristic object, serendipity. Heuristic: to find by chance; to find by trial and error; to carry on a systematic search; to use databases, etc. Technical: to define the topic; to establish a corpus. Check the research done on the topic; to define theoretical and critical approaches; to learn about the bibliography, the references, the quotation and their various norms; the annotation.

## FES 373 Professional Communication/Communication

 in WorkplaceThe course examines the necessary techniques as far as spoken and written French are concerned for a job search in French speaking environments, as well as the necessary
linguistic tools. The course helps students to acquire the necessary skills they need as job candidates in French and to provide guidance in preparing a Curriculum Vitae and a cover letter. The course will also prepare students for job interviews. The course aims at helping students to develop language skills in order to prepare candidates in French speaking environments in Europe, by familiarizing them with techniques required for written and oral discourse.

## FES 374 Fachsprache für den Beruf (Business German)

The course focuses on: 1) the nature and specificities of German businesses and 2) the knowledge of German for trade relationships. Awareness of intercultural relations will be complemented by the acquisition of practical knowledge (such as writing a CV, oral and written business communication, etc.). With the help of various methods of instruction, students will be introduced to German in the field of Business.

## FES 375 French in Europe

This course familiarizes students with the most important European issues while using the French language. More specifically, it focuses on lexical fields used in various European nstitutions, as well as on vocabulary necessary to relate to European politics. Through activities, students will get familiarized with professional environments within European institutions. Upon completion of this course, students will be able to: 1) understand European institutions and to describe them using the French language, 2) develop their skills in written and spoken French, while working on texts originating from various European institute and 3) describe, discuss and/or support a European proposal/policy in French language.

## FES 376 Deutsch für Europäische Beziehungen (German in European Relations)

The purpose of this specialization course is to provide students with knowledge of European and international relations through the medium of German and to encourage the use of the German language in this specific context. The course will be structured around selected themes and will include missions aiming at improving understanding and using German in selected fields. For example, the course may include a simulation of an international meeting, discussing its agenda, work in committees and preparation of common findings. Issues discussed in the course will be the functioning of European and international institutions, the mechanisms of political and financial cooperation, diplomacy and international negotiation, international agreements and their drafting, Non-Governmental Organizations, etc.

FES 404 French for Academic Purposes III
The course is based on the knowledge acquired during the course French for Academic Purposes II and it further promotes the familiarization of the students with academic texts in French. In particular, the course: 1) studies reference and composition texts, 2) introduces students to the relevant techniques. The course aims at helping students to identify the main and secondary ideas in academic texts, to spot the terms that lead to the cohesion of such texts and to compare that proposed ideas, while improving their skills in written discourse production.

## FES 475 Final Undergraduate Thesis

In order to receive a Degree in French Language and Literature, students are required to write a thesis. The topic is chosen together with the professor who will be supervising the research. 20-30 pages are expected, including the bibliography. This course will challenge and guide students to efficiently construct their first research essay, meeting deadlines and norms of presentation, focusing on the quality and relevance of the research as well as on effective presentation of arguments, in line with scientific ethics. Registration in this course requires students to have 180 ECTS.

## B. Alternative Compulsory Courses

## FES 100 Introduction à la Linguistique

Les points traités dans ce cours, qui constituent des concepts fondamentaux pour les cours de linguistique qui vont suivre sont: le langage et les langues; de l'écriture à la linguistique; en quoi la linguistique est-elle une science? langue, langage, parole; norme et usage; la communication; les signes (notamment le signe linguistique: signifié, signifiant, référent); la langue comme système (structures, outils d'analyse). Les étudiants apprendront à définir la linguistique et ses différents domaines (phonétique, phonologie, morphologie, syntaxe, sémantique, sociolinguistique), à donner des exemples relatifs à chacun d'entre eux.)

FES 105 De la Grammaire à la Linguistique I
Le cours a pour but de faciliter le passage de la grammaire traditionnelle à la linguistique. Une bonne maîtrise de la grammaire de base est nécessaire. Plus précisément, les étudiants étudieront et réinvestiront la notion de grammaire et de linguistique, la morphologie flexionnelle et dérivationnelle, le morphème et le lexème, les parties du discours et les catégories de mots, la phrase simple, les subordonnées de la phrase complexe, la phrase verbale, les voix, les modes, les valeurs temporelles, l'aspect.)

## FES 106 De la Grammaire à la Linguistique II

Faisant suite au cours FES 105, ce cours est consacré à l'étude des phrases plus complexes, aux définitions et aux principes fondamentaux de la syntaxe appliquée du français et à l'initiation aux différentes approches en syntaxe du français: notionnelle, fonctionnelle et distributionnelle: l'approche notionnelle et la révision des natures et des fonctions des éléments de la phrase complexe; les éléments subordonnés au nom et au verbe; l'approche fonction-naliste; l'approche distributionnaliste. Les étudiants sauront reconnaître les natures et les fonctions de la grammaire traditionnelle; analyser des phrases complexes selon des points de vue syntaxiques différents: approches notion-nelle, fonctionnelle et distributionnelle.)

## FES 132 Histoire de la Civilisation Française

Présentation d'un panorama des grands thèmes de la civilisation française, du Xle siècle à la fin du XIXe siècle: Moyen Âge, Renaissance, Baroque, Classicisme, Lumières, Romantisme, Positivisme, Spiritualisme, Modernité, etc. Le cours a pour objectif de familiariser les étudiants avec les moments, les noms et les caractères d'une histoire de la culture européenne et française afin de leur fournir les points de repère indispensables dans la suite de leur cursus. L'objectif est également de montrer, que les arts, les techniques, la science, les idées et la littérature ne sont pas des disciplines cloisonnées mais reliées.

## FES 134 Principles of Contemporary Teaching of French

 as Foreign LanguageAfter examining theoretical aspects, students will be trained on the basis of curricula and textbooks of French as Foreign Languages, as used nowadays in schools of Secondary and Higher Education in Cyprus, along with the appropriate educational material for lesson planning (lesson plans and worksheets).

## FES 140 Histoire de la Littérature Française

Le cours présente, en progression chronologique, les grands courants de la littérature française et francophone du Moyen Âge au XXIe siècle, ainsi qu'une sélection de textes représentatifs. Parallèlement, il propose une première étude de la naissance et de l'évolution de certains genres littéraires en essayant de montrer les ruptures et les continuités les plus importantes de la littérature de langue française.

## FES 200 Morphosyntaxe

Le cours rappelle et traite les points suivants: morphologie, syntaxe, morphosyntaxe; parties du discours, classes de mots et de morphèmes, axe paradigmatique, axe syntag-matique; unités d'analyse morphosyntaxique; constituants immédiats et analyse générativiste des phrases et syntagmes (structures
arborescentes); groupe nominal: nom et déterminants; groupe verbal: temps et aspect. Les étudiants sauront identifier la nature et la fonction des mots dans un texte; analyser un mot en morphèmes; une phrase en structures arborescentes; un corpus à partir d'une consigne de nature morphosyntaxique; lire et discuter des extraits de grammaires de référence.)

## FES 201 Syntaxe

I- Grammaticalité / Acceptabilité, Énoncé / Enonciation, Syntagme / Paradigme, II- Opérations dans l'analyse syntaxique (Commutation, Effacement, Insertion, Déplacement, Permutation), III- Analyse en constituants immédiats, IV- Modalités de la phrase, V- Juxtaposition, Coordination, Corrélation, VI- Subordination. Le cours s'appuie sur des notions acquises dans le cours FES 200 Morphosyntaxe. Les étudiants maîtriseront des notions fondamentales en syntaxe (grammaticalité, acceptabilité, énoncé, énonciation, etc.). Ils sauront faire une analyse syntaxique de la phrase 1) selon le modèle de la théorie distributionnaliste et 2) en constituants immédiats. Ils sauront enfin maîtriser les problèmes syntaxiques relatifs à la subordination.

## FES 230 La France du XXe siècle

Ce cours couvre la période de la proclamation de la Ille République jusqu'aux années 1980. 1870 1914: L'installation de la Ille République; la société française; révolution industrielle et développement économique. L'entre-deux-guerres: les conséquences de la guerre; la crise des années 30. Depuis 1939: la France dans la seconde guerre mondiale. La IVe République: les trente glorieuses. La Ve République: la crise économique; histoires des mœurs, des idées et de l'art. Les étudiants connaîtront ainsi pour chaque période l'histoire politique, sociale et économique ainsi que l'histoire des idées, de l'art et de la culture populaire du pays.)

## FES 233 Cartographies

How does the modern citizen perceive the complexity of the contemporary world? What is Europe's place in the world map? This course aims to introduce students to some of the major global issues through texts and maps, beyond the conventional limits of Eurocentrism. Students will gain insight into the complexity of major issues facing modern humanity through the study of texts and maps.

## FES 234 L’Europe dans les Médias Français: Idéologies et Discours Politiques

Ce cours examine les discours dominants de la scène politique et intellectuelle française sur la question de I'Union européenne, et plus globalement du projet européen. L'étude des médias français permettra d'identifier les positionnements des personnalités du spectre politique français de l'extrême-gauche jusqu'à
l'extrême-droite, afin de comprendre quelle idée de l'Europe est aujourd'hui diffusée dans les médias français, médias qui reflètent et influencent l'opinion publique française. Les étudiants comprendront comment se structure et se fait un débat d'idées dans les médias et ils comprendront le rôle essentiel joué par les médias dans la diffusion d'idéologies. Ils sauront déchiffrer les spécificités et éléments communs des divers discours sur la question européenne et situer idéologique-ment ces points de vue.

## FES 239 The Legacy of the French Revolution

The French Revolution (1789) is one of the most important events not only in European but in world history as well. Despite its dark side (the Terror Era or the Napoleonic Tyranny that resulted to the restoration of the monarchy) or its exaggerations (such as changing calendar with a week of ten days and days of ten hours), its current legacy is invaluable: democratic principles (citizens' equality, religious freedom, etc.) proclamations (the Proclamation of Human and Citizen's Rights was voted in 1789), even concepts of political daily life, such as the idea of self-determination of peoples or the distinction between "Left" and "Right", are essentially a legacy of the social and political overturn brought by the French Revolution.

## FES 240 Littérature Moderne (1870-1945)

Le cours se propose d'ébaucher un tableau de la littérature moderne, de la fin du XIXe siècle à la Seconde guerre mondiale. Il examine l'œuvre des moralistes, l'esprit fin de siècle, le courant impressionniste, l'humanisme et le mysticisme nouveaux. Le cours met l'accent sur les éléments novateurs apportés par le mouvement surréaliste et sur ses présupposés, psychanalytiques notamment. Le cours a pour objectif l'étude des textes novateurs de la période étudiée afin de saisir l'interrogation morphologique et idéologique qui les accompagne et la mise en évidence d'équivalences avec les littératures européennes de la même période.

## FES 241 Littérature Contemporaine (1945- )

Le cours a pour objectif de présenter les grandes lignes de I'histoire de la littérature française contemporaine et d'initier les étudiants à la prose de l'après-guerre à travers l'étude de textes majeurs, représentatifs notamment du mouvement existentialiste, de la littérature de l'absurde et du Nouveau Roman.

## FES 242 Littérature Baroque et Classique

Le cours propose une étude de la littérature française du XVIIe siècle et met en relief la diversité de la création littéraire et artistique de cette période. Il approfondit aussi bien la poésie que les genres narratifs. La littérature d'idées, la pensée religieuse et le théâtre font l'objet d'une attention particulière. Le cours a également pour objectif
de montrer les rapports entre l'esthétique architecturale et littéraire par exemple, où dominent d'une part les thèmes de la métamorphose, de l'inconstance, de la fuite et du mouve-ment, et le souci de régularité, de vraisemblance et de permanence d'autre part.

## FES 244 Neology and Vocabulary Renewal

Neology as a basic mechanism for the renewal of the vocabulary of a language is a very important phenomenon to be studied, especially nowadays, when many new concepts are introduced on a daily basis, in every natural language, regarding different fields, scientific, technical, informal language, slang, etc. (for example, in Greek: touch screen/oӨóvŋ a甲ńs, tablet/тá $\mu \pi \lambda \varepsilon \tau$, grexit, google/ үкоиүк ${ }^{\text {áp } \omega) . ~ T h i s ~ c o u r s e ~}$ examines basic principles of neology and analyses fundamental terms and concepts (neology definition, subject of research, mechanisms for the creation of new words, changes or transformations of existing concepts, phenomena and types of loans, etc.). The study is completed with observation and analysis of different types of texts (among others, EU texts, databases, general and specialised dictionaries, professionally translated texts, etc.

## FES 245 Rhétorique de la Publicité

Le cours porte sur la notion de communication et met I'accent sur la publicité. II traite différentes formes de communication (verbale, non-verbale, directe et indirecte) et il examine la façon dont les informations sont transmises au destinataire dans les messages publicitaires. Ce cours a pour objectif d'étudier: 1) la langue (écrite, audiovisuelle, langage du corps, paralangage etc.), 2) les figures de style (métonymie, métaphore, périphrase, I'allégorie, comparaison, parallélisme, hyperbole, litote etc.) paronomase et 3) la dimension culturelle du message publicitaire dans l'acte de communication. Les étudiants sauront comment la publicité communique avec son récepteur. Ils seront capables de comprendre, de traiter et d'évaluer les informations données dans la publicité.

## FES 246 Littérature et Bande Dessinée

Etude des rapports dynamiques entre la bande dessinée et la littérature via des analyses d'oeuvres, principalement du XXe siècle. Les deux arts privilégient la narration à l'intersection du textuel et de l'iconique. Pour mieux comprendre l'interaction du texte et de l'image, il faut examiner autant des codes (graphiques, iconiques et idéographiques), que des structures (visuelles de récit case, bande, blanche-, son organisation). Les étudiants auront également l'occasion d'étudier des aspects techniques mis en oeuvre pour la création d'une BD ou d'un roman graphique, liés à la transmédialité, ou utilisation de plusieurs média, afin de créer une oeuvre nouvelle.

## FES 265 Théâtre Européen, Moderne et Postmoderne

On étudie les rapports des oeuvres dramatiques avec les principaux mouvements littéraires et artistiques qui ont influencé le théâtre moderne et postmoderne au cours du XXe siècle jusqu'aujourd'hui en Europe. Précisément, on interroge comment l'oeuvre dramatique accueille les grands principes de la modernité et de la postmodernité tout en les soumettant aux régles du genre.

## FES 282 La Bataille des Langues en Europe

Le cours entend montrer que les enjeux linguistiques sont simultanément des enjeux politiques. S'il faut se garder de trop facilement étiqueter de «nationaliste » l'attachement des peuples à leur langue lorsque c'est parfois tout ce qui leur reste pour «faire société» à l'heure de la libre circulation des capitaux, des biens et des services et de la course planétaire aux profits, il faut aussi se garder des réflexes identitaires face à l'ouverture vers le monde. Le cours examine des études de cas particuliers (Belgique, pays basque espagnol, Malte), comme des luttes que se livrent des langues européennes dominantes entre elles.)

## FES 290 Introduction to European Literature

European Literature, starting with the Homeric epics, was particularly developed after the invention of typography. Beyond the literature and famous writers of Europe presented in the course through their representative texts, the course focuses on the issue of the existence of a "European literature". Also, which forms or principles are common, representing a European conscious or unconscious culture?

## FES 300 Lexicologie - Lexicographie

I- Communication; Sens; Signe linguistique, II- Lexicologie: Types de dictionnaires; La définition dans les dictionnaires de langue, III- Les analyses du sens lexical: analyse sémique ou componentielle, Prototypes et stéréotypes, IV- Relations sémantiques: hyperonymie et hyponymie, synonymie, antonymie, co-hyponymie, V- Polysémie et homonymie, métaphore, métonymie, synecdoque, VIFormations des mots. Les étudiants maîtriseront les concepts élémentaires de la sémantique lexicale. Ils sauront 1) définir les différents types de dictionnaires et les différents types de définitions; 2 ) expliquer les procédés de formation des mots.

## FES 301 Sociolinguistique

Les notions traitées dans ce cours sont les suivantes: langue et usage; norme endogène et norme exogène; variable, variété et variation; l'enquête sociolinguistique: objectifs, outils, méthodologie; la variation géographique (langue, dialecte, géolecte, topolecte, parler et patois); l'exemple d'un topolecte particulier; le sociolecte (prestige latent et prestige apparent); le sexolecte; les situations de contact des langues; la diglossie et le
bilinguisme; le créole, le pidgin et le sabir; les aspects du système linguistique d'un créole francophone; la planification linguistique et son importance politique dans la francophonie.

## FES 302 Analyse Linguistique du Texte

Les notions traitées dans ce cours sont les suivantes: analyse du texte; texte et discours; textualité; les rapports à l'intérieur de la phrase et en dehors de la phrase; la cohésion; la cohérence; la progression de l'information: thème et rhème; les types de progression thématique. Les étudiants sauront que les catégories grammaticales diffèrent des catégories textuelles, que des problèmes grammaticaux 'traditionnels' peuvent être diversement abordés; que la mise en texte requiert des compétences particulières. Ils sauront repérer les règles textuelles qui organisent un texte et les appliquer dans leurs propres productions.

## FES 303 Phonologie

Les points traités seront: phonétique articulatoire; phonétique combinatoire; interprétation phonologique de données; initiation à la théorie phonologique via les deux modèles structuraliste et générativiste. Les étudiants connaîtront les bases de la phonétique articulatoire, de la phonétique combinatoire et des phénomènes prosodiques. Ils sauront décrire les sons du français d'un point de vue articulatoire et connaîtront les oppositions phonologiques du système français. Sur la base d'un corpus, de consignes précises et en appliquant les deux modèles théoriques expliqués, ils pourront résoudre des problèmes phonologi-ques présentés dans le cours.)

## FES 306 Linguistique Générale

Qu'est-ce qui distingue la philosophie, la logique et la grammaire de la linguistique? En partant du principe que la grammaire est aussi ancienne que l'écriture ou la poésie, on peut se demaner pourquoi la linguistique n'existe que depuis la fin du XIXe siècle-début du XXe. Comment arrive-t-on en sciences du langage? Le cours examine ainsi divers aspects de la sémantique, de la syntaxe, de la léxicologie, de la morphologie, de l'acquisition des langues. Le cours précise les bases de la linguistique théorique tout en la différenciant de la linguistique appliquée.

## FES 309 Histoire de la Linguisique

Le premier objectif du cours est d'éveiller l'étudiant à l'histoire de la linguistique. A travers l'étude de documents pédagogiques et authentiques variés seront présentées les grandes étapes de l'histoire de la linguistiques qui observe trois époques. Depuis l'Antiquité et jusqu'aux Lumières, la réflexion linguistique existe certes, mais reste soumise aux préoccupations qui lui sont étrangères. Au fil du XXème siècle et jusqu'à Saussure, la
linguistique s'émancipe et s'institutionnalisme en devenant une discipline universitaire autonome. Après Saussure, I'histoire de la linguistique du XXème siècle s'énonce en termes d'écoles, de théories et de programmes de recherches. Enfin l'étudiant sera amener à approfondir les domaines ou les connaissances en linguistique fondamentale (phonétique, phonologie, lexicologie, morphologie, syntaxe, sémantique, pragmatique).

## FES 310 Langue, Histoire et Société

Les notions traitées seront: les familles de langues du monde, le groupe indo-européen; la formation de la Romania et de l'Europe; le substrat et le superstrat; principes et lois de phonétique historique et leur application aux voyelles et aux consonnes; évolution morphologique du syntagme nominal; historique de l'orthographe; tradition lexicographique. Les étudiants sauront expliquer les changements du système de la langue française et certaines évolutions phonologiques précises; expliquer des exemples d'évolution morphosyntaxique du latin vulgaire au français moderne; comprendre les singularités de la langue française mais aussi connaître les éléments communs aux autres langues latines.

## FES 325 European Literatures

This course stems from the fields of Comparative Literature and Literary Theory. The first part is theoretical and offers a brief account of fundamental concepts. The second part focuses on more specific issues such as the establishment of national literatures in Europe, the emergence of the 'great authors', the appearance and disappearance of certain texts in various canons, the creation of a European literary corpus and its importance in the ideological colonization of the non-Western world, as well as its problematization within the postcolonial paradigm and its consequences on the overall readability of non-European literary production.

## FES 330 The European Integration (Jean Monnet Module)

The course is a historical and thought-provoking presentation of the European construction, after an introduction, covering the genesis and evolution of the European concept from Antiquity to the nineteenth century. Furthermore, on the basis of a body of literary texts (Moschos, Podiébrad, Camões, Alexis Léger, Jean Monnet), the foundations of European integration since 1950 are analysed, as well as institutions and current EU policies. Cross-cutting issues are the theory of climates, the christianitas, and the European identity. The course is designed for students to acquire knowledge that allows not only to take an active part in the new social, cultural,
political and economic European environment, but also to understand and positively criticize it.

## FES 338 Europe and Liberalism

The emerge and establishment of liberal regimes and the transition from the feudal to liberal societies and economies in the European continent coincide with the development of literature, arts, and sciences, the Enlightenment and the Industrial Revolution, human rights and universal suffrage, all of which lead to world domination by the European states. European power proved to be the verita effettuale of the modern liberal system. The course will examine the basic theoritical, political and socio-economic processes that followed the rise of liberalism from Machiavelli and Thomas Hobbes to Max Weber, Hannah Arendt and Raymond Aron. Particular emphasis will be given on French liberalism of the 19th and 20th century (Tocqueville, Constant, Bastiat).

## FES 340 Littérature du XIXe siècle

Le cours s'intéresse aux grands mouvements littéraires français qui ont vu le jour au XIXe siècle tels le romantisme, le réalisme, le naturalisme. Il analyse leur maturation, leurs grands moments et leur mutation dans une approche qui entend montrer des schémas thématiques et stylistiques transversaux. L'étude des grands mouvements littéraires du XIXe siècle français dans leur division en genres cherche à mieux rendre compte des genres nouveaux ou renouvelés au cours de la période étudiée et de l'interrogation qui les accompagne. Plus globalement, elle permet de mettre I'accent sur ce qui prépare la modernité littéraire.

## FES 342 Littérature de la Renaissance

Le cours se propose de suivre l'évolution de la littérature française à travers la nouvelle vision anthropocentrique établie par l'humanisme; de faire valoir les rapports entre littérature et idéologie qui passent par le questionnement religieux de la Réforme face au catholicisme; d'étudier les genres littéraires à la lumière de la redécouverte de I'Antiquité (formes poétiques fixes, rhétorique, lyrisme, textes moralistes) et au cours de leur métamorphose (le grotesque chez Rabelais, l'essai de Montaigne, etc.).

Le cours a pour objectif d'apprendre aux étudiants à lire des textes anciens en mettant à profit les analyses contemporaines.

## FES 343 Littérature du XVIIIe siècle

Le cours met l'accent sur la force subversive des textes littéraires et philosophiques des Lumières. Outre l'extrême variété du genre romanesque (romans picaresques, d'apprentissage social, de mœurs, érotiques, exotiques, etc.), sont examinées ses différentes formes (épistolaire, autobiographies fictives ou réelles, récits d'apprentissage
rétrospectifs, discours dialogués). Les Lumières engendrent aussi toutes sortes de démythifications, dans le domaine de la littérature comme dans celui des idées, donnant naissance aux notions fondamentales de la philosophie et de la science politique. Le cours a pour objectif de former l'esprit critique par son spectacle: critique de la société, des genres et du discours critique lui-même.

## FES 347 La France devant les grands Défis de I' UE

Comment le citoyen français d'aujourd'hui perçoit-il «l'union sans cesse plus étroite entre les peuples européens» du traité de Lisbonne? Quels sont les nouveaux défis de l'Union européenne? Quelle est la place de I'Union européenne dans la cartographie mondiale? Le cours entend étudier certains des grands défis européens (migrations, environnement, terrorisme, paysage politique) auxquels fait face un des pays fondateurs de I'Union européenne, la France.

## FES 350 Littérature Comparée

Le premier volet de ce cours est théorique: définition de la littérature comparée et présentation de son évolution, de ses notions-clés et de ses points de repère théoriques (l'intertextualité, la réception, l'horizon d'attente, l'interculturalité, les géographies littéraires, etc.). Le second volet propose des textes qui se prêtent à une lecture compara-tiste. Le cours a pour objectif de montrer comment la critique littéraire établit des relations de différence et de similitude entre les textes; de mettre en question l'«objectivité» des divisions entre les littératures nationales et les genres littéraires, mais aussi entre des discours différents et des systèmes sémiotiques distincts.

## FES 360 Didactique du FLE

Présentation de concepts centraux à la discipline du FLE, en particulier : position du FLE dans la didactique des langues étrangères et secondes ; FLE et sciences de l'éducation; FLE et sciences du langage ; la langue comme objet d'enseignement et d'apprentissage ; la variété des situations d'enseignement et d'apprentissage ; les conditions d'appropriation d'une langue étrangère ; la salle de classe et ses acteurs; les compétences fondamentales qui structurent les programmes d'apprentissage.Examen critique de différentes méthodologies et approches propres au domaine de la didactique des langues : par exemple, méthode dite « Grammaire Traduction », méthode directe, méthode audio-orale, méthode structuro-globale audiovisuelle, approche communicative, théorie socioculturelle (Vygotski), nouveaux modèles interactionnistes pour l'acquisition des langues étrangères (focalisation sur la forme, négociation du sens, etc.).

## FES 391 Intellectual Movements in Europe: Renaissance,

 Reform, EnlightenmentWhile the great movements between 1400 and 1800 Renaissance, Reformation and Enlightenment - are considered cradled in, respectively, Italy, Germany and France, their reality was pan-European. A multiplicity of thinkers and written works brought about incalculable changes. Among these, Humanism placed the individual in a new system of values, social and political. Medieval authority met increasing opposition from emancipatory concepts and movements that often derived from Greek and Roman philosophy, literature and art. New concepts of the cosmos and the world emerged, with a strong anthropocentric predilection. The course will study deep changes in philosophical, literary, political and social dimensions.

## FES 392 The Archipelago of European Thinking

This course studies the theoretical constructions that support the political and social establishment of "Europe" and links them to the historical evolution of its people. The course focuses on the theory of the state by Hobbes, on ideas emerging from the three revolutions (English, American, French), which established democracy in Europe and the world, and also on theories of liberalism and socialism that put their mark on the 20th century. This course helps students to comprehend the role of philosophical theories in political and social changes and to familiarize with the idioms of European intellect.

## FES 396 La France de Ille Republique Face I' Allemagne

Le but du cours est d'amener les étudiants à mieux comprendre l'évolution générale de la société française sous la Ille République et de faire le lien entre les évènements politiques, les mouvements sociaux, les arts et les idées. Il s'agit, en outre, de mesurer la place de la France en Europe et dans le monde, et les réponses apportées par la France et l'Allemagne aux nombreux défis de cette période.

## FES 411 Discourse, Society and Ideology: The French Media

Politics is one of the social fields where discourse practices are the most prevalent: political knowledge is, by definition, based on ideology and political ideologies are reproduced, to a great extent, through discourse. The course begins from the framework of the theory of announcement. It studies and analyses data including articles from French press, blogs and internet forums, regarding political and social events.

## FES 420 Discourse in the framework of European Enlightenment

The course follows the interpretation of European Enlightenment in the homonymous work of the late

Panayotis Kondylis. Kondylis analyses the multiple ideas and intellectual schemes trending in the field of the European spirit from the early and late Enlightenment. The writer analyses the way that the old Christian and God-centric world icon is replaced by contemporary. This course will focus on four areas: science, society, economy and politics. For each one of these areas, we will examine the carriers of change, their designation as structural points of the new world icon, as well as the new scientific, social, economic and political reality, as set in the new historical framework. The course forms part of the broader philosophical analysis of the genesis of the dominant principles of European contemporaneity.

## FES 425 Economy as Bio-politics in Foucault

The concept of raison d'État (always in French in international bibliography) implies a particular understanding of the political act as independent or contrary to the applicable ethics, laws and rules. Its origins can be traced to the Renaissance in Italy and attributed to the Florentine Niccolò Machiavelli (1469-1527). The term ragion di Stato per se was advanced by the Venetian Jesuit Giovanni Botero (1544-1617) in 1598 with a very significant departure from the philosophy of Machiavelli, whom he was conflicting. The ragion di Stato was not about increasing the power of the Prince by military means, but the strengthening of the State through the active support of the national economy, conceived as the capacity of the labour force for production of goods and wealth generating taxes to state coffers. This does not mean that the State renounces deception and violence in trying to strengthen the economy. The French philosopher Michel Foucault (19261984), for whom, during the modern period, the logic of life (economy) supersedes the logic of death (politics), analyses this fundamental change in the orientation of the modern State in the general study of the History of Sexuality in the West (1976-1984), by introducing the term of bio-politics.

## FES 428 Introduction to Theories of Beauty

"Beauty" is a fundamental category in European art and literature. The course gives a short introduction to the long history of the term from antiquity to modernism. To this end, extracts of the key historical texts by Ovid ("Metamorphoses"), Plato ("Phaedrus"), Schiller ("On naive and sentimental poetry", 1795), Darwin ("The Descent of Man and Selection in Relation to Sex", 1871) and Freud ("Civilization and its discontents", 1930) will be studied. Examples drawn from visual arts and literature will be discussed and analysed in detail.

## FES 430 The European Film Tradition

The course presents through films and texts the main streams and directors of Europe, along with basic film making techniques (camera movements, montage,
raccord, etc.). The course also presents the main theoretical principles of European Cinema, by studying the texts of important cinema reviewers and specialized magazines, such as Cahiers du Cinema in France or Sequence in UK.

FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films

Entre littérature et cinéma, tous deux arts de la narration, les relations sont souvent envisagées à travers le prisme de l'adaptation des textes littéraires, dont la pratique a alimenté des débats parfois très vifs. Les Misérables (1862) de Victor Hugo, roman social du XIXe siècle qui n'a pas perdu de son actualité, a inspiré une riche filmographie dès 1897 avec le court métrage des frères Lumière Victor Hugo et les principaux personnages des Misérables. Depuis, plus de cinquante réalisateurs ont adapté le roman, ce qui permet d'examiner les questions relatives à I'adaptation des œuvres littéraires au cinéma: Un film peut-il recréer, sous de nouvelles formes, ce que l'on croit spécifiquement littéraire? Cherche-t-il à transcrire ou à interpréter sa source? Questions différemment abordées par les cinéastes, qui feront l'objet d'analyses lors du cours.

FES 432 La Condition Humaine dans la Culture de XXe s.
Au XXe siècle, écrivains, penseurs et artistes interrogent la condition humaine à travers des formes de représentation qui surprennent leurs récepteurs. Les grands événements historiques et politiques, comme les deux Guerres mondiales, installent dans la création littéraire des thèmes comme l'espace du vide, la mort, l'attente, la fin, l'absurde. Les oeuvres étudiées interrogent la relation de la mémoire avec l'oubli, le vide de la connaissance, l'absurdité de la conditon humaine.

## FES 433 Transformations du Texte Littéraire

Le cours propose l'examen du processus de la transformation du texte littéraire en d'autres formes de représentation (adaptation télévisuelle, théâtrale ou scénique, cinématographique, plastique, musicale, etc.) et comment ce processus met en lumière les nouveaux rapports entre texte et transformation, et la création d'une oeuvre nouvelle. L'analyse des oeuvres littéraires et leurs diverses adaptations initiera les étudiants aux principaux mécanismes de création littéraire, à la question de la réécriture, de l'adaptation, de la transponsition et de la transmédiation.

## FES 439 Littérature et Peinture

Ce cours examine les rapports entre littérature et peinture depuis l'antiquité gréco-romaine jusqu'à nos jours, à l'aire du numérique, à travers des grands mouvements esthétiques européens. L'approche transversale permettra aux étudiants de saisir les spécificités de la littérature et
de la peinture à l'intersection du visible et du lisible, à travers l'analyse des textes théoriques critiques ainsi que I'analyse des textes littéraires et picturales.

FES 444 Introduction to the Theory of "Sublime"
The "sublime" is a main category in European Art. The course intends to make an introduction to the history of "sublime" from antiquity to post-modernism. For this reason, we will read excerpts from classical texts, such as the dissertations of Longinus ("Of the height of eloquence", 1st century B.C.), of Boileau («Traité du sublime», 1674), of Burke («A Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful», 1757), of Kant («Kritik der Urteilskraft», 1790) and of Lyotard («Le sublime et l'avant-garde», 1988). Samples of European Literature and art will be also analysed, for the comprehension and critique of this aesthetic theory.

## FES 483 European Art and Greek Mythology

Ancient Greek myths are an integral part of European culture. They enrich literature, theatre, films, music and visual arts. Why are we still interested in ancient myths? Why do they not lose their charm? This course studies different approaches to this issue. It goes back to the beginnings of the scientific exploration of ancient mythology. Changes and transformations of the mythical tradition will be studied, as well as newer approaches in the fields of literary the interpretation, psychanalysis and semiotics. Finally, the course addresses the broader relationship between myth and philosophy, religion, society and politics.

## FACULTY OF HUMANITIES



## DÉPARTMENT D’ÉTUDES FRANÇAISES ET EUROPÉENNES

Le Département d'Études françaises et européennes délivre deux diplômes universitaires de premier cycle (l'admission se fait par le même concours d'entrée):

- Langue et Littérature françaises
- Langues modernes et Études européennes

Ces deux diplômes apportent aux étudiant une éducation et une formation d'actualité. Les jeunes diplômés peuvent poursuivre leur carrière à Chypre ou à l'étranger, non seulement comme professeurs et/ou ambassadeurs de langue et civilisation françaises, mais aussi comme citoyens européens, maîtrisant 3 ou 4 langues (grec, anglais, français et/ou allemand). La nouvelle structure de ces diplômes de premier cycle consiste en deux parcours distincts à partir d'un tronc commun.

## PRÉSIDENT

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LECTEUR
Christakis Christofi

## A. DIPLÔME EN LANGUE ET LITTÉRATURE FRANÇAISES

L'aire de spécialisation Langue et Littérature françaises permet aux étudiants de développer des compétences de haut niveau pour communiquer en français, et d'étudier en profondeur la linguistique et la culture françaises, les arts et le cinéma. Les jeunes diplômés peuvent poursuivre leur carrière dans l'enseignement, le journalisme, les services publics nationaux et étrangers, et la traduction profession-nelle. Comme d'autres formations universitaires, le diplôme de Langue et Littérature françaises peut ouvrir à de nouveaux horizons et constituer ainsi la clé d'une carrière professionnelle réussie.

## Obtention du diplôme de Langue et Littérature Françaises

Pour obtenir le diplôme de Langue et Littérature françaises, les étudiants doivent valider des cours totalisant un minimum de 240 ECTS. Ces cours incluent: 1) des cours obligatoires, 2 ) des cours de langue étrangère, et 3 ) des cours optionnels.

## Cours Obligatoires

FES 102 Discours Oral I
FES 103 Discours Écrit I
FES 104 Discours Écrit II
FES 112 Introduction au Monde Francophone
FES 113 Introduction au Monde Européen
FES 131 Société Française Contemporaine
FES 171 Introduction aux Outils de la Recherche
FES 202 Français Universitaire I
FES 203 Français Universitaire II
FES 204 Discours Oral II - Phonétique
FES 220 Cybercultures Francophones
FES 222 FLE et Cultures Populaires
FES 361 Théories de la Traduction
FES 362 Pratiques de la Traduction
FES 370 Méthodologie de la Recherche
FES 373 Communication Professionnelle
FES 375 Le Français en Europe
FES 404 Français Universitaire III
FES 430-439 Deux Cours de la Thématique Cinéma - Arts visuels - Communication
FES 100-499 Deux Cours de la Thématique Didactique
FES 472 Mémoire de Fin d'études (avec prérequis de 180 ECTS)
ENG 101 Academic Communication in English
Chaque semestre, cette liste est complétée par d'autres cours obligatoires, tels que des cours de littérature française, de linguistique, et des cours sur la pensée, la culture et les arts visuels européens. Ces cours sont annoncés avec leur code respectif au début de chaque semestre.

## Cours Obligatoires Supplémentaires (exemples)

FES 100 Introduction à la Linguistique
FES 105 De la Grammaire à la Linguistique I
FES 106 De la Grammaire à la Linguistique II
FES 132 Histoire de la Civilisation Française
FES 134 Principles of Contemporary Teaching of French as Foreign Language
FES 140 Histoire de la Littérature Française
FES 200 Morphosyntaxe
FES 201 Syntaxe
FES 230 La France du XXe siècle
FES 233 Cartographies
FES 234 L'Europe dans les Medias Francais: Idéologies et Discours Politiques
FES 239 The Legacy of French Revolution
FES 240 Littérature Moderne (1870-1945)
FES 241 Littérature Contemporaine (1945- )
FES 242 Littérature Baroque et Classique
FES 244 Neology and Vocabulary Renewal
FES 245 Rhétorique de la Publicité
FES 246 Littérature et Bande Dessinée
FES 265 Théâtre Européen, Moderne et Postmoderne
FES 282 La Bataille des Langues en Europe
FES 290 Introduction to European Literature
FES 300 Lexicologie - Lexicographie
FES 301 Sociolinguistique
FES 302 Analyse Linguistique du Texte
FES 303 Phonologie
FES 306 Linguistique Générale
FES 309 Histoire de la Linguistique
FES 310 Langue, Histoire et Société
FES 325 European Literatures
FES 330 The European Integration (Jean Monnet Module)
FES 338 Europe and Liberalism
FES 340 Littérature du XIXe siècle
FES 342 Littérature de la Renaissance
FES 343 Littérature du XVIIIe siècle
FES 347 La France devant les grands défis de I' UE
FES 350 Littérature Comparée
FES 360 Didactique du FLE
FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment
FES 392 The Archipelago of European Thinking
FES 396 La France de Ille Rèpublique face I' Allemagne
FES 411 Discourses, Society, and Ideology:The French Media
FES 420 Discourse in the framework of European Enlightenment
FES 425 Economy as Bio-politics in Foucault
FES 428 Introduction to Theories of Beauty
FES 430 The European Film Tradition

FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films FES 432 La Condition Humaine dans la Culture de XXe s FES 433 Transformations du Texte Littéraire
FES 439 Littérature et Peinture
FES 444 Introduction to the Theory of "Sublime"
FES 483 European Art and Greek Mythology

## Cours de Langue Étrangère

Trois niveaux de la même langue étrangère (le Département recommande le français), offert par le Centre de Langues, pour un total de 15 crédits.

## Cours Optionnels

Tout cours offert par l'Université, excepté les cours du Département d'Études Françaises et Européennes, est considéré comme un cours optionnel. Au moins 16 ECTS doivent être obtenus de trois facultés différentes de I'Université. Les cours dispensés par le Centre de Langues et le Centre sportif sont considérés comme des cours de facultés indépendantes.
À tous les semestres, y compris le semestre d'été, les étudiants peuvent s'inscrire une seule fois au cours FES 150 Études indépendantes (3 ECTS) et FES 250 Expérience de Recherche (6 ECTS). L'inscription est subordonnée à l'approbation du professeur superviseur au Département.
En accord avec la décision du Sénat (no. 2/2006, § 3.9.2.1), tout étudiant qui assiste de son gré à des lectures publiques, séminaires ou conférences organisés par les Départements de I'Université, ou par le Centre d'enseignement et d'apprentissage (KEDIMA) (20 heures de cours intensif $=1$ ECTS), est en droit de valider 2 ECTS pour la totalité des 4 ans de ses études. Le Département recommande que tous les étudiants de première année se procurent le Bulletin auprès de la MERIMNA.

## Mineure du Diplôme

Les étudiants qui le désirent peuvent, parallèlement à l'option «majeure» en Langue et Littérature françaises, suivre un programme mineur en Études européennes. En plus des cours communs aux deux parcours, qui sont reconnus par le Conseil de Département sur simple demande, les étudiants doivent valider 5 cours supplémen-taires: 2 cours FES, 1 cours SPS, 1 cours HIST et 1 cours LAW.

## B. DIPLÔME DE LANGUES MODERNES ET ÉTUDES EUROPÉENNES

Les étudiants du parcours Langues Modernes et Études Européennes seront amenés à développer des compétences avancées en français et/ou anglais et/ou allemand, et étudieront en profondeur la pensée et la culture européenne ainsi que les études filmiques. Ils acquerront des connaissances solides en sciences
humaines et sociales ainsi qu'en sciences politiques, en particulier sur des sujets relatifs aux études européennes. Ils seront à même de poursuivre leur carrière dans des domaines professionnels où ces spécialisations sont requises, par exemple les institutions européennes, les services publics nationaux et étrangers, organisations culturelles, fondations, entreprises, ONG, etc.

## Obtention du diplôme en Langues Modernes et Études Européennes

Pour obtenir le diplôme en Langues Modernes et Études Européennes, les étudiants doivent valider des cours totalisant un minimum de 240 ECTS. Ces cours incluent:

1) des cours obligatoires, enseignés dans les deux langues que létudiant a choisi, 2) des cours dispensés par le Département d'Études anglaises, d' Histoire et archéologie, de Sciences politiques et sociales, de Droit, et le Centre de Langues, et 3) des cours optionnels.

## COMBINAISON ANGLAIS-FRANÇAIS

## Cours Obligatoires

FES 102 Discours Oral I
FES 103 Discours Écrit I
FES 104 Discours Écrit II
FES 112 Introduction au Monde Francophone
FES 113 Introduction au Monde Européen
FES 131 Société Française Contemporaine
FES 171 Introduction aux Outils de la Recherche
FES 202 Français Universitaire I
FES 203 Français Universitaire II
FES 204 Discours Oral II - Phonétique
FES 220 Cybercultures Francophones
FES 222 FLE et Cultures Populaires
FES 361 Théories de la Traduction
FES 362 Pratiques de la Traduction
FES 370 Méthodologie de la Recherche
FES 373 Communication Professionnelle
FES 375 Le Français en Europe
FES 404 Français Universitaire III
FES 430-439 Deux Cours de la Thématique Cinéma - Arts visuels - Communication
FES 432 La Condition Humaine dans la Culture de XXe s
FES 433 Transformations du Texte Littéraire
FES 439 Littérature et Peinture
FES 475 Mémoire de fin d'études ou Deux Cours FES (avec prérequis de 180 ECTS)

Chaque semestre, cette liste est complétée par des cours obligatoires supplémentaires relatifs à la pensée et à la culture européennes ainsi qu'aux arts visuels. Ces cours sont annoncés avec leur code respectif au début de chaque semestre.

## Cours Obligatoires Supplémentaires (exemples)

FES 233 Cartographies
FES 234 L'Europe dans les Médias Français: Idéologies et Discours Politique
FES 244 Neology and Vocabulary Renewal
FES 245 Rhétorique de la Publicité
FES 246 Littérature et Bande Dessinée
FES 265 Théâtre Européen, Moderne et Postmoderne
FES 282 La Bataille des Langues en Europe
FES 290 Introduction to European Literature
FES 306 Linguistique Générale
FES 309 Histoire de la Linguistique
FES 310 Langue, Histoire et Société
FES 325 European Literatures
FES 330 The European Integration (Jean Monnet Module)
FES 347 La France devant les grands Défis de I' UE
FES 350 Littérature Comparée
FES 364 L'Europe - Mosaïque des Langues
FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment
FES 392 The Archipelago of European Thinking
FES 393 Eros et Politique
FES 396 La France de Ille République Face I' Allemagne
FES 411 Discourses, Society, and Ideology: the French Media
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FES 428 Introduction to Theories of Beauty
FES 430 The European Film Tradition
FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films
FES 432 La Condition Humaine dans la Culture du XXe s.
FES 433 Tranformations du Texte Littéraire
FES 439 Littérature et Peinture
FES 442 Philosophie de l'argent
FES 444 Introduction to the Theory of "Sublime"
FES 483 European Art and Greek Mythology
Cours dispensés par les Départements d'Études anglaises, d' Histoire et archéologie, de Sciences politiques et sociales, de Droit, et par le Centre de Langues (voir les descriptifs des cours sur le site des départements respectifs)
ENG 101 Academic Communication in English
ENG 103 Academic Essay Writing
ENG 239 Introduction to Cultural Criticism
ENG 249 Frontiers of/in Europe
ENG 279 Introduction to Critical Thinking
LAN 203 English for European and International Relations
2 Cours HIST (annoncés au début de chaque semestre)
2 Cours SPS (SPS 251 et SPS 266)
2 Cours LAW (annoncés au début de chaque semestre)

## Cours Optionnels

Tout cours offert par l'Université, excepté les cours du Département d'Études françaises et européennes, est considéré comme un cours optionnel. Au moins 12 ECTS doivent être obtenus de trois facultés différentes de I'Université. Les cours dispensés par le Centre de Langues et le Centre sportif sont considérés comme des cours de facultés indépendantes.

À tous les semestres, y compris le semestre d'été, les étudiants peuvent s'inscrire une seule fois au cours FES 150 Études indépendantes ( 3 ECTS ) et FES 250 Expérience de Recherche (6 ECTS). L'inscription est subordonnée à l'approbation du professeur superviseur au Département.
En accord avec la décision du Sénat (no. 2/2006, § 3.9.2.1), tout étudiant qui assiste de son gré à des lectures publiques, séminaires ou conférences organisés par les Départements de l'Université, ou par le Centre d'enseignement et d'apprentissage (KEDIMA) (20 heures de cours intensif = 1 ECTS), est en droit de valider 2 ECTS pour la totalité des 4 ans de ses études. Le Département recommande que tous les étudiants de première année se procurent le Bulletin auprès de la MERIMNA.

## Mineure du Diplôme

Les étudiants qui le désirent peuvent, parallèlement à I'option «majeure» en Études européennes, suivre un programme mineur en Langue et Littérature françaises. En plus des cours communs aux deux parcours, qui sont reconnus par le Conseil de Département sur simple demande, les étudiants doivent valider 5 cours supplémentaires FES enseignés chacun en français.

## COMBINAISON FRANÇAIS-ALLEMAND

## Cours Obligatoires

FES 102 Discours Oral I
FES 103 Discours Écrit I
FES 104 Discours Écrit II
FES 109 Schriftliche Ausdruckstechniken (Written Discourse Production)
FES 112 Introduction au Monde Francophone
FES 113 Introduction au Monde Européen
FES 131 Société Française Contemporaine
FES 171 Introduction aux Outils de la Recherche
FES 180 Allemand Universitaire I
FES 181 Deutsch in der Sozialwissenschaft (German in Social Sciences)
FES 202 Français Universitaire I
FES 203 Français Universitaire II
FES 204 Discours Oral II - Phonétique
FES 220 Cybercultures Francophones
FES 222 FLE et Cultures Populaires
FES 280 Allemand Universitaire II
FES 361 Théories de la Traduction
FES 362 Pratiques de la Traduction

FES 370 Méthodologie de la Recherche
FES 373 Communication Professionnelle
FES 375 Le Français en Europe
FES 376 Deutsch für Europäische Beziehungen (German for European Relations)
FES 404 Français Universitaire III
FES 430-439 Deux Cours de la Thématique Cinéma - Arts visuels-Communication
FES 475 Mémoire de Fin d'études ou Deux Cours FES (avec prérequis de 180 ECTS)

Chaque semestre, cette liste est complétée par des cours obligatoires supplémentaires concernant le domaine plus vaste des sciences culturelles et littéraires, avec un accent particulier sur la pensée et les lettres européennes. Ces cours sont annoncés avec leur code respectif au début de chaque semestre.

Cours Obligatoires Supplémentaires (exemples)
FES 233 Cartographies
FES 234 L'Europe dans les Médias Français: Idéologies et Discours Politique
FES 244 Neology and Vocabulary Renewal
FES 245 Rhétorique de la Publicité
FES 246 Littérature et bande dessinée
FES 265 Théâtre Européen, Moderne et Postmoderne
FES 282 La Bataille des Langues en Europe
FES 290 Introduction to European Literature
FES 306 Linguistique Générale
FES 309 Histoire de la Linguistique
FES 310 Langue, Histoire et Société
FES 325 European Literatures
FES 330 The European Integration (Jean Monnet Module)
FES 347 La France devant les grands Défis de I' UE
FES 350 Littérature Comparée
FES 364 L'Europe - Mosaïque des Langues
FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment
FES 392 The Archipelago of European Thinking
FES 393 Eros et Politique
FES 396 La France de Ille République Face I' Allemagne
FES 411 Discourses, Society, and Ideology: the French Media
FES 420 Discourse in the framework of European Enlightenment
FES 425 Economy as Bio-politics in Foucault
FES 428 Introduction to Theories of Beauty
FES 430 The European Film Tradition
FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films

FES 432 La Condition Humaine dans la Culture du XXe s
FES 433 Tranformations du Texte Littéraire
FES 439 Littérature et Peinture
FES 442 Philosophie de I'argent
FES 444 Introduction to the Theory of "Sublime"
FES 483 European Art and Greek Mythology
Cours dispensés par les Département d' Histoire et archéologie, de Sciences politiques et sociales, et de Droit

2 Cours HIST (annoncés au début de chaque semestre)
2 Cours SPS (SPS 251 et SPS 266)
2 Cours DROIT (annoncés au début de chaque semestre)
À tous les semestres, y compris le semestre d'été, les étudiants peuvent s'inscrire une seule fois au cours FES 150 Études indépendantes (3 ECTS) et FES 250 Expérience de Recherche (6 ECTS). L'inscription est subordonnée à I'approbation du professeur superviseur du Département.
En accord avec la décision du Sénat (no. 2/2006, § 3.9.2.1), tout étudiant qui assiste de son gré à des lectures publiques, séminaires ou conférences organisés par les Départements de l'Université, ou par le Centre d'enseignement et d'apprentissage (KEDIMA) (20 heures de cours intensif = 1 ECTS), est en droit de valider 2 ECTS pour la totalité des 4 ans de ses études. Le Département recommande que tous les étudiants de première année se procurent le Bulletin auprès de la MERIMNA.

## Mineure du Diplôme

Les étudiants qui le désirent peuvent, parallèlement à l'option «majeure» en Études européennes, suivre un programme mineur en Langue et Littérature françaises. En plus des cours communs aux deux parcours, qui sont reconnus par le Conseil de Département sur simple demande, les étudiants doivent valider 5 cours supplémentaires FES enseignés chacun en français.

## COMBINAISON ANGLAIS-ALLEMAND

## Cours Obligatoires

FES 109 Schriftliche Ausdruckstechniken (Techniques d'expression écrite)
FES 120 Deutsche Kultur (Culture allemande)
FES 121 Mündliche Sprachproduktion (Discours oral)
FES 122 Schriftliche Sprachproduktion (Discours écrit/Compétences écrites)
FES 171 Introduction aux Outils de la Recherche
FES 180 Deutsch für Akademiker I (Allemand universitaire I)

FES 181 Deutsch in der Sozialwissenschaft (L'allemand dans les sciences sociales)
FES 182 Deutsche Populärkultur und Deutsch als Fremdsprache (Culture populaire allemande et allemande langue étrangère)
FES 280 Deutsch für Akademiker II (Allemand universitaire II)
FES 370 Méthodologie de la Recherche
FES 374 Fachsprache für den Beruf (Communication professionnelle)
FES 376 Deutsch für Europäische Beziehungen (L'allemand dans les relations européennes)
FES 380 Deutsch für Akademiker III (Allemand universitaire III)
FES 381 Deutsch für Akademiker IV (Allemand universitaire IV)
FES 475 Mémoire de Fin d'études ou deux cours FES (avec prérequis de 180 ECTS) et moyenne de 7

Chaque semestre, cette liste est complétée par des cours obligatoires supplémentaires concernant le domaine plus vaste des sciences culturelles et littéraires, avec un accent particulier sur la pensée et les lettres européennes. Ces cours sont annoncés avec leur code respectif au début de chaque semestre.

## Cours Obligatoires Supplémentaires (exemples)

FES 234 L'Europe dans les Médias Français: Idéologies et discours politique
FES 244 Neology and Vocabulary Renewal
FES 245 Rhétorique de la publicité
FES 282 La bataille des langues en Europe
FES 290 Introduction to European Literature
FES 310 Langue, histoire et société
FES 325 European Literatures
FES 330 The European Integration (Jean Monnet Module)
FES 350 Littérature Comparée
FES 364 L'Europe - Mosaïque des Langues
FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment
FES 392 The Archipelago of European Thinking
FES 393 Amour et Politique
FES 411 Discourses, Society, and Ideology: the French Media
FES 420 Discourse in the framework of European Enlightenment
FES 425 Economy as Bio-politics in Foucault
FES 428 Introduction to Theories of Beauty
FES 430 The European Film Tradition
FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films
FES 442 Philosophie de I'argent
FES 444 Introduction to the Theory of "Sublime"
FES 483 European Art and Greek Mythology

Cours dispensés par les Département d'Études anglaises, d' Histoire et archéologie, de Sciences politiques et sociales, de Droit, et le Centre de Langues
(voir les descriptifs des cours sur le site des départements respectifs)
ENG 101 Academic Communication in English
ENG 103 Academic Essay Writing
ENG 239 Introduction to Cultural Criticism
ENG 249 Frontiers of/in Europe
ENG 279 Introduction to Critical Thinking
ENG 500 Elective Course of the thematic area Cinema
ENG 500 Elective Course of the thematic area Translation Studies
ENG 590 Translating for the European Union Institutions LAN 202 Public Speaking
LAN 203 English for European and International Relations
2 Cours HIST (annoncés au début de chaque semestre) 2 Cours SPS (SPS 251 et SPS 266) 2 Cours LAW (annoncés au début de chaque semestre)

À tous les semestres, y compris le semestre d'été, les étudiants peuvent s'inscrire une seule fois au cours FES 150 Étude indépendante ( 3 ECTS) et FES 250 Expérience de Recherche (6 ECTS). L'inscription est subordonnée à I'approbation du professeur superviseur du Département.
En accord avec la décision du Sénat (no. 2/2006, § 3.9.2.1), tout étudiant qui assiste de son gré à des lectures publiques, séminaires ou conférences organisés par
les Départements de l'Université, ou par le Centre d'enseignement et d'apprentissage (KEDIMA) (20 heures de cours intensif = 1 ECTS), est en droit de valider 2 ECTS pour la totalité des 4 ans de ses études. Le Département recommande que tous les étudiants de première année se procurent le Bulletin auprès de la MERIMNA.

NB: les étudiants de la combinaison de langues anglaisallemand n'ont pas la possibilité de s'inscrire pour un programme d'études secondaire (Mineure) en Langue et Littérature françaises.

## DESCRIPTIF DES COURS

## A. Cours Obligatoires

## FES 102 Discours Oral I

Ce cours dispensé en français permet de développer les compétences de compréhension et d'expression orales en français langue étrangère. Les apprenants, à travers des activités diverses et progressives amélioreront leurs compétences tout en prenant conscience des spécificités du discours oral. Ils seront familiarisés avec les mécanismes liés à l'expression orale, à la prise de parole dans diverses situations de communication (monologue, discussion, débat, exposé).

## FES 103 Discours Écrit I

This course presents an overview of French grammar. Through understanding of authentic texts, the basic grammatical structures as well as their components are examined (voices, moods, tenses, inflection, etc.). Students undertake short assignments, individually or in groups, in order to improve their skills in written discourse, focusing on grammar and spelling. The course aims at identifying students' difficulties in French grammar and at the same time strengthening their written skills.

## FES 104 Discours Écrit II

This course is the continuation of Written Language I. Therefore, students must be familiar with the simple structures of written French. Based on the understanding of authentic documents, the course focuses on more complex structures (such as embedded clauses). This course will enable students to produce sentences expressing causality, purpose, time, etc. Students produce individual and/or team assignments, in order to improve their skills in written discourse, the emphasis being on grammar and spelling. The course aims at helping students to a) engage in depth with French grammar, b) identify their particular difficulties in grammar skills, and c) apply rules in written discourse.

## FES 109 Schriftliche Ausdruckstechniken (Written Expression Techniques)

This course is taught in German. In this course, students will be introduced to and will deal with various types of texts (literary, journalistic, historical etc. texts). The students will learn how to approach these texts in an academic way in order to be able to reflect and reproduce their contents. This can be done in the form of a summary, a report or an essay.

## FES 112 Introduction au Monde Francophone

Ce cours, proposé au début de la formation des étudiants, présente dans un premier temps le monde francophone et par la suite la société contemporaine française. Les étudiants ont l'occasion de se familiariser avec les mœurs et coutumes de la société française et de mieux comprendre les tendances modernes de la communauté française et francophone. Plus précisément, le cours s'organise autour de quatre thématiques en relation avec le monde francophone: 1) I'histoire et l'évolution de la francophonie, 2) les mœurs et coutumes, 3) les arts et 4) l'influence de la langue-culture française sur Chypre et son histoire.

## FES 113 Introduction au Monde Européen

Ce cours veut offrir aux jeunes étudiants une connaissance élémentaire sur la réalité culturelle de l'Europe en mutation. Dans ce cadre, le cours présente et analyse des sujets de culture et sur l'évolution de l'Europe
(langues, religions, populations, arts, multilinguisme, éducation, institutions, etc.).

## FES 121 Mündliche Sprachproduktion (Oral Discourse Production)

This course aims at helping students to acquire the necessary skills for oral communication in German. Various methods of instruction will help students to improve their oral communication skills as well as their auditory skills. Students will learn how to take part in discussions about a variety of topics concerning culture, politics and society. With the help of practical language exercises, students will learn how to a) discuss and exchange arguments b) draw conclusions, and c) summarise discussions.

FES 122 Schriftliche Sprachproduktion (Writing Skills) In this course students will practice and improve their writing skills in German. With the help of various methods of instruction, students will acquire important linguistic means for the written language. A variety of writing exercises will help to practice and foster the knowledge of these means. Furthermore, the students will acquire basic knowledge in academic writing and official written communication.

## FES 131 Société Française Contemporaine

Le cours propose une vue d'ensemble des évolutions de la société française depuis la Seconde Guerre mondiale, alors que la France est entrée de plein pied dans la modernité. Seront présentées les mutations économiques, politiques et sociales de la société française, depuis 1945 jusqu'à nos jours, à travers l'étude de documents pédagogiques et authentiques variés (textuels, iconiques, audio et vidéo).

## FES 171 Introduction aux Outils de la Recherche

Le cours entend initier les étudiants à la maîtrise des outils de documentation et de saisie et à l'exploitation, au traitement et à la présentation des données recueillies. II prépare donc à toutes les activités de recherche durant les trois premières années du cursus. Le cours a pour objectif de fournir aux étudiants, en français, le bagage technique nécessaire de manière à ce qu'ils soient capables d'effectuer une recherche bibliographique simple, de manipuler correctement un logiciel de traitement de texte, de maîtriser certains autres outils bureautiques et de connaître les règles de base de la navigation internautique.

FES 180 Deutsch für Akademiker I (German for
Academic Purposes I)
This course is taught in German and it focuses on: 1) extending further knowledge of German morphology and syntax, 2) developing their ability to produce grammatically correct and well-structured sentences, 3) introducing student to more complex language structures
and syntax problems (especially as regards the word order, verbal groups, choice of prepositions). On the completion of the course, students will have mastered German spelling and important grammatical structures. They will pass from the sentence syntax to the construction of meaning and they will make use of the strategies and the tools which are necessary for the production of more complex texts.

## FES 181 Deutsch in der Sozialwissenschaft (German for Social Studies

This course provides students with fundamental knowledge of academic working in German contexts. Therefore, basic elements of the German academic culture will be explained and explored. The course emphasizes two topics: 1) philological working skills and 2) German as a foreign language in the academic field. Topic 1 will comprise essential academic working skills such as writing a bibliography, working with libraries and databases, literature search as well as formal aspects of written work and oral presentations. Topic 2 will deal with German as an academic language. With the help of practical language exercises, students will be introduced to writing in German in an academic context.

## FES 182 Deutsche Populärkultur und Deutsch als Fremdsprache (German Popular Culture and German as a Foreign Language)

The purpose of this course is to provide students with knowledge of regional and cultural topics in Germany, Switzerland and Austria. Furthermore, students will extend their knowledge of the German language. With the help of various media (press, television, internet) a variety of topics will be introduced and emphasized. Students will gain an overview of German popular culture, as well as reflecting on different aspects of their own culture. Additionally, students will be taught how to express (oral and written) themselves and their views on these topics.

## FES 202 Français Universitaire

Les étudiants sont progressivement initiés à la production d'un texte élaboré et construit, de niveau universitaire. Le cours s'organise autour de deux axes complémentaires: reconnaître les structures d'organisation d'un texte; apprendre à produire un énoncé correctement rédigé et logiquement structuré

## FES 203 Français Universitaire II

This course is the continuation of FES 202, focusing on the production of academic French. It presents the reading methodology for texts, how to identify basic ideas and their logical articulation, as well as how to summarize and re-formulate the information provided. With this course student will develop their comprehension and production skills in written and spoken French. Through consecutive activities, students will be able to identify the main ideas
of the text, reformulate them in a cohesive manner and articulate them, using logical links.

## FES 204 Discours Oral II - Phonétique

S'appuyant sur des savoirs acquis en FES 102, ce cours vise à développer les compétences compréhension et de production orale ainsi que les compétences d'interaction dans diverses situations de communication (monologue suivi, dialogue, dialogue, débats, discussions, etc...).

Il approfondit également la compétence phonologique des étudiants -rythme, prosodie, intonation et autres phénomènes articulatoires - et introduit l'Alphabet Phonétique International (API).

## FES 220 Cybercultures Francophones

Le cours propose des activités d'apprentissage qui permettent aux étudiants de consolider les structures de la langue française déjà acquises en discours oral et écrit, activités notamment basées sur des documents textuels et audio-visuels disponibles en ligne. Dans une approche collaborative, les étudiants participent activement au processus d'apprentissage et utilisent les technologies d'information et de communication (TIC).

## FES 222 FLE et Cultures Populaires

La culture populaire, qui est produite et appréciée par le plus grand nombre, constitue un univers privilégié pour découvrir des perceptions et classifications de la réalité différentes, d'autres valeurs et modes de vie. Ce cours propose, dans une approche interculturelle, une découverte de la culture dominante- notamment à travers la chanson et la culture médiatique (radio, télévision, Internet) - de la société française de ce début de XXIe siècle marqué par une mondialisation accrue. Ce cours permet également aux étudiants de développer leurs compétences, notamment à l'oral, à travers de nombreuses activités individuelles et collectives. Les activités seront principalement basées sur des documents authentiques contemporains offrant aux étudiants une vision très actuelle de la réalité française et francophone. Ce cours s'appuiera sur les avantages qu'offrent aujourd'hui les nouvelles technologies (principalement Internet) en didactique des langues.

## FES 280 Deutsch für Akademiker II (German for Academic Purposes II)

This course is taught in German and focuses on familiarisation with text cohesion elements and ability to write cohesive paragraphs. Students exercise in writing and re-writing, and, in particular, improve in formulating paragraphs, introductions, transitions and conclusions of complex comments and essays. At the end of the semester, students will have acquired the expressions stating cause or effect, intention and opposition or concession. They will be able to formulate in a cohesive manner paragraphs, transitions and conclusions.

## FES 361 Théories de la Traduction

Ce cours présente brièvement l'histoire de la réflexion traductologique (théories prescriptives, descriptives et prospectives), puis quelques approches contemporaines comme celles de R. Jakobson, W. Benjamin, M. Blanchot, G. Mounin, J. R. Ladmiral, G. Steiner, R. Amossy, A. Berman, H. Meschonnic, P. Ricœur, U. Eco. Il présente ensuite quelques lieux communs concernant l'activité de la traduction (les notions de la fidélité, de la lisibilité et
de la transparence, le mythe de Babel, la traduction herméneutique, etc.). Le cours a pour objectif de fournir aux étudiants les connaissances théoriques qui leur seront nécessaires pour le passage à la pratique de la traduction.

## FES 362 Pratiques de la Traduction

Ce cours propose de retrouver, à partir d'exercices de traduction (versions et thèmes), la typologie des erreurs les plus fréquentes en traduction, dans le couple particulier français-grec. Il consiste surtout en des travaux pratiques sur une sélection de textes littéraires (prose et poésie) et non littéraires (médecine, informatique, biologie, anthro-pologie, archéologie), ainsi que sur des textes publicitaires et journalistiques. Il examine des points particuliers: traduction des métaphores, des néologismes ou de la terminologie. Le cours a pour objectif de faire prendre conscience aux étudiants des mécanismes et pièges du passage d'une langue et d'une culture à une autre.

## FES 370 Méthodologie de la Recherche

La recherche universitaire est une activité créatrice, certes, mais très codifiée. Que chercher? Comment chercher? Comment évaluer le résultat d'une recherche? Comment le mettre à profit dans notre projet particulier et dans le respect de quelles règles rédactionnelles et déontologiques? Telles sont les principales questions directrices du cours, qui se décline autour de trois axes: Théorique, technique, déontologique. Théorique: définition du cadre théorique de la recherche, des principes à partir desquels elle se construit. Heuristique: la sérendipité; les méthodes aveugles; le corpus en tant qu'objet heuristique; chercher au hasard; chercher par essai/erreur; chercher faux, trouver juste; la recherche aléatoire; la recherche systématique; la RDI (Recherche Documentaire Informatisée). Technique: définir le sujet/établir un corpus; vérifier l'état de la recherche; définir l'approche théorique et critique; la bibliographie, la note, la citation et leurs diverses normes; enfin, la réalisation matérielle du mémoire.

## FES 373 Communication Professionnelle

Ce cours examine les techniques et outils linguistiques nécessaires du français écrit et oral pour rechercher du travail dans des environnements francophones. Dans ce cours, les étudiants acquerront les compétences
nécessaires dont ils auront besoin en français en tant que demandeurs d'emploi, prépareront des Curriculum Vitae et des lettres de motivation, et s'entraîneront à passer des entretiens d'embauche. Le cours cherche à les aider à mobiliser leurs compétences linguistiques, en les familiarisant avec les techniques spécifiques pour le discours écrit et oral, afin de les préparer aux environnements francophones en Europe.

## FES 374 Fachsprache für den Beruf (Business German)

The course focuses on: 1) the nature and specificities of German businesses and 2) the knowledge of German for trade relationships. Awareness of intercultural relations will be complemented by the acquisition of practical knowledge (such as writing a CV, oral and written business communication, etc.). With the help of various methods of instruction, students will be introduced to German in the field of Business.

## FES 375 Le Français en Europe

Dans ce cours de français sur objectifs spécifiques, les étudiants sont familiarisés aux grandes thématiques européennes en français, et plus particulièrement aux divers champs lexicaux des institutions et politiques européennes. De plus, les étudiants, par le biais d'activités variées, sont progressivement initiés à interagir dans un contexte professionnel lié aux institutions européennes.

## FES 376 Deutsch für Europäische Beziehungen (German in European Relations)

The purpose of this specialisation course is to provide students with knowledge of European and international relations through the medium of German and to encourage the use of the German language in this specific context. The course will be organized around selected themes and will also include missions which aim at improving understand-ing and using German in selected fields. For example, the course may include a simulation of an international meeting, discussing its agenda, work in committees and preparation of common findings. Issues discussed in the course will be the functioning of European and internatio-nal institutions, the mechanisms of political and financial cooperation, diplomacy and international negotiation, international agreements and their drafting, Non-Governmental Organisations, etc.

## FES 404 Français Universitaire III

Dans ce cours, dans le cadre d'un projet pédagogique, les étudiants mobiliseront diverses compétences acquises dans les cours FES 102, 103, 104, 202 et 203 (notamment méthodologies de lecture et d'écoute de documents, de recherche, d'exposé écrit et oral, de réduction de documents, d'argumentation et de dissertation, ...). Ils associeront ainsi leurs connaissances à la faculté de les organiser dans un projet pertinent et construit en collaboration.

## FES 472 Mémoire

Afin d'être diplômé de Langue et Littérature françaises, il est impératif que les étudiants écrivent un mémoire de maîtrise. Le sujet est choisi de concert avec le professeur superviseur de la recherche de l'étudiant. Le minimum de pages attendues est de 20 à 30 pages, incluant la bibliographie. Ce cours aidera les étudiants à gérer leur première rédaction longue de recherche, c'est-à-dire à respecter les délais et les normes de présentation, à veiller à la qualité et à la pertinence de leur recherche ainsi qu'à leur argumentation et au respect de l'éthique scientifique. L'inscription au cours FES 472 Mémoire donne aux étudiants 180 ECTS.

## B. Cours Obligatoires Supplémentaires Par exemple:

## FES 100 Introduction à la Linguistique

Les points traités dans ce cours, qui constituent des concepts fondamentaux pour les cours de linguistique qui vont suivre sont: le langage et les langues; de l'écriture à la linguistique; en quoi la linguistique est-elle une science? langue, langage, parole; norme et usage; la communication; les signes (notamment le signe linguistique: signifié, signifiant, référent); la langue comme système (structures, outils d'analyse). Les étudiants apprendront à définir la linguistique et ses différents domaines (phonétique, phonologie, morphologie, syntaxe, sémantique, sociolinguistique), à donner des exemples relatifs à chacun d'entre eux.)

## FES 105 De la Grammaire à la Linguistique I

Le cours a pour but de faciliter le passage de la grammaire traditionnelle à la linguistique. Une bonne maîtrise de la grammaire de base est nécessaire. Plus précisément, les étudiants étudieront et réinvestiront la notion de grammaire et de linguistique, la morphologie flexionnelle et dérivationnelle, le morphème et le lexème, les parties du discours et les catégories de mots, la phrase simple, les subordonnées de la phrase complexe, la phrase verbale, les voix, les modes, les valeurs temporelles, I'aspect.)

## FES 106 De la Grammaire à la Linguistique II

Faisant suite au cours 「EL 105, ce cours est consacré à l'étude des phrases plus complexes, aux définitions et aux principes fondamentaux de la syntaxe appliquée du français et à l'initiation aux différentes approches en syntaxe du français: notionnelle, fonctionnelle et distributionnelle: l'approche notionnelle et la révision des natures et des fonctions des éléments de la phrase complexe; les éléments subordonnés au nom et au verbe; I'approche fonction-naliste; |'approche distributionnaliste. Les étudiants sauront reconnaître les natures et les fonctions de la grammaire traditionnelle; analyser des phrases complexes selon des points de vue syntaxiques différents: approches notion-nelle, fonctionnelle et distributionnelle.)

FES 132 Histoire de la Cvilisation Française
Présentation d'un panorama des grands thèmes de la civilisation française, du XIe siècle à la fin du XIXe siècle: Moyen Âge, Renaissance, Baroque, Classicisme, Lumières, Romantisme, Positivisme, Spiritualisme, Modernité, etc. Le cours a pour objectif de familiariser les étudiants avec les moments, les noms et les caractères d'une histoire de la culture européenne et française afin de leur fournir les points de repère indispensables dans la suite de leur cursus. L'objectif est également de montrer, que les arts, les techniques, la science, les idées et la littérature ne sont pas des disciplines cloisonnées mais reliées.

## FES 134 Principes de I'apprentissage Contemporain du Français Langue Étrangère

Après présentation et discussion d'aspects théoriques de l'enseignement et de l'apprentissage des langues étrangères, les étudiants se familiariseront avec le matériel pédagogique destiné à la conception de cours de FLE (plans de leçon et fiches de travail). Cette formation sera basée sur les programmes ministériels chypriotes ainsi que sur les manuels de Français Langue Étrangère utilisés actuellement dans l'enseignement secondaire (lycée) et supérieur à Chypre.

## FES 140 Histoire de la Littérature Française

Le cours présente, en progression chronologique, les grands courants de la littérature française et francophone du Moyen Âge au XXIe siècle, ainsi qu'une sélection de textes représentatifs. Parallèlement, il propose une première étude de la naissance et de l'évolution de certains genres littéraires en essayant de montrer les ruptures et les continuités les plus importantes de la littérature de langue française.

## FES 200 Morphosyntaxe

Le cours rappelle et traite les points suivants: morphologie, syntaxe, morphosyntaxe; parties du discours, classes de mots et de morphèmes, axe paradigmatique, axe syntagmatique; unités d'analyse morphosyntaxique; constituants immédiats et analyse générativiste des phrases et syntagmes (structures arborescentes); groupe nominal: nom et déterminants; groupe verbal: temps et aspect. Les étudiants sauront identifier la nature et la fonction des mots dans un texte; analyser un mot en morphèmes; une phrase en structures arborescentes; un corpus à partir d'une consigne de nature morpho-syntaxique; lire et discuter des extraits de grammaires de référence.)

## FES 201 Syntaxe

I-Grammaticalité / Acceptabilité, Énoncé / Énonciation, Syntagme / Paradigme, II- Opérations dans l'analyse syntaxique (Commutation, Effacement, Insertion, Déplace-ment, Permutation), III- Analyse en constituants immédiats, IV- Modalités de la phrase, V- Juxtaposition, Coordination, Corrélation, VI- Subordination. Le cours s'appuie sur des notions acquises dans le cours FES 200

Morphosyntaxe. Les étudiants maîtriseront des notions fondamentales en syntaxe (grammaticalité, acceptabilité, énoncé, énoncia-tion, etc.). Ils sauront faire une analyse syntaxique de la phrase 1) selon le modèle de la théorie distributionnaliste et 2 ) en constituants immédiats. Ils sauront enfin maîtriser les problèmes syntaxiques relatifs à la subordination.

## FES 230 La France du XXe siècle

Ce cours couvre la période de la proclamation de la Ille République jusqu'aux années 1980. 1870 1914: L'installation de la Ille République; la société française; révolution industrielle et développement économique. L'entre-deux-guerres: les conséquences de la guerre; la crise des années 30. Depuis 1939: la France dans la seconde guerre mondiale. La IVe République: les trente glorieuses. La Ve République: la crise économique; histoires des mœurs, des idées et de l'art. Les étudiants connaîtront ainsi pour chaque période l'histoire politique, sociale et économique ainsi que l'histoire des idées, de l'art et de la culture populaire du pays.

## FES 233 Cartographies

Comment le citoyen moderne perçoit-il la complexité du monde contemporain? Quelle est la place de l'Europe dans la cartographie mondiale? Ce cours a pour objectif de présenter aux étudiants certains de grands enjeux mondiaux à travers des textes et des cartes, au-delà de limites conventionnelles de l'eurocentrisme. Les étudiants connaîtront mieux la complexité de grands enjeux auxquelles l'humanité moderne est confrontée à travers l'étude de textes et de cartes.

## FES 234 L'Europe dans les Médias Français: Idéologies et Discours Politiques

Ce cours examine les discours dominants de la scène politique et intellectuelle française sur la question de l'Union européenne, et plus globalement du projet européen. L'étude des médias français permettra d'identifier les positionnements des personnalités du spectre politique français de l'extrême-gauche jusqu'à l'extrême-droite, afin de comprendre quelle idée de l'Europe est aujourd'hui diffusée dans les médias français, médias qui reflètent et influencent l'opinion publique française. Les étudiants comprendront comment se structure et se fait un débat d'idées dans les médias et ils comprendront le rôle essentiel joué par les médias dans la diffusion d'idéologies. Ils sauront déchiffrer les spécificités et éléments communs des divers discours sur la question européenne et situer idéologique-ment ces points de vue.

## FES 239 L'héritage de la Révolution Française

La Révolution française (1789) est l'un des événements les plus importants de l'histoire européenne et de l'histoire du monde moderne. Malgré ses aspects obscurs (la Terreur et la tyrannie napoléonienne qui résulta en la
restauration de la monarchie) ou ses exagérations (tel le changement du calendrier et son système de semaine de dix jours et de jours de dix heures), son héritage est aujourd'hui inestimable: les principes démocratiques (l'égalité des citoyens, la liberté de croyance, etc.), les proclamations (la Proclamation des Droits de I'homme et du citoyen votée en 1789), et même les concepts de la vie politique quotidien-ne, comme la notion de
l'autodétermination les peuples ou la distinction entre la gauche et la droite politique, constituent un héritage essentiel du bouleversement social et politique amené par la Révolution française.

## FES 240 Littérature Moderne (1870-1945)

Le cours se propose d'ébaucher un tableau de la littérature moderne, de la fin du XIXe siècle à la Seconde guerre mondiale. Il examine l'œuvre des moralistes, l'esprit fin de siècle, le courant impressionniste, I'humanisme et le mysticisme nouveaux. Le cours met l'accent sur les éléments novateurs apportés par le mouvement surréaliste et sur ses présupposés, psychanalytiques notamment. Le cours a pour objectif l'étude des textes novateurs de la période étudiée afin de saisir l'interrogation morpholo-gique et idéologique qui les accompagne et la mise en évidence d'équivalences avec les littératures européennes de la même période.

## FES 241 Littérature Contemporaine (1945- )

Le cours a pour objectif de présenter les grandes lignes de I'histoire de la littérature française contemporaine et d'initier les étudiants à la prose de l'après-guerre à travers l'étude de textes majeurs, représentatifs notamment du mouvement existentialiste, de la littérature de l'absurde et du Nouveau Roman.

## FES 242 Littérature Baroque et Classique

Le cours propose une étude de la littérature française du XVIIe siècle et met en relief la diversité de la création littéraire et artistique de cette période. Il approfondit aussi bien la poésie que les genres narratifs. La littérature d'idées, la pensée religieuse et le théâtre font l'objet d'une attention particulière. Le cours a également pour objectif de montrer les rapports entre l'esthétique architecturale et littéraire par exemple, où dominent d'une part les thèmes de la métamorphose, de l'inconstance, de la fuite et du mouve-ment, et le souci de régularité, de vraisemblance et de permanence d'autre part.

## FES 244 La Néologie et le Renouvellement Lexical

La néologie est le procédé lexical principal qui contribue en soi au renouvellement lexical d'une langue donnée. Il s'agit d'un phénomène linguistique contemporain très important dans la mesure où on observe, actuellement, la naissance ou la création de nouveaux mots quotidiennement. Ces nouveaux mots appartiennent à des différents domaines: scientifiques, techniques, la langue non
standard, Ia langue de jeunes, etc. Nous pouvons citer comme exemple les unités lexicales telles que grexit, mobile tactile, liseuse, smartphone, googler. Dans le cadre de ce cours, nous étudierons les principes fondamentaux du phénomène de la néologie (la définition de la néologie, son objet d'étude, les différents procédés de création lexicale, des changements ou des transformations aux définitions existantes, des phénomènes et des types d'emprunts, etc.). Cette analyse sera complétée par une observation et par la suite par une étude pratique de différents types de textes (entre autres de textes de la communauté européenne et leur traduction dans les deux langues, des bases de données, des dictionnaires de la langue générale et des dictionnaires de langues de spécialités, des traductions officielles de textes, etc.).

## FES 245 Rhétorique de la Publicité

Le cours porte sur la notion de communication et met l'accent sur la publicité. Il traite différentes formes de communication (verbale, non-verbale, directe et indirecte) et il examine la façon dont les informations sont transmises au destinataire dans les messages publicitaires. Ce cours a pour objectif d'étudier: 1) la langue (écrite, audiovisuelle, langage du corps, paralangage etc.), 2) les figures de style (métonymie, métaphore, périphrase, l'allégorie, compa-raison, parallélisme, hyperbole, litote etc.) paronomase et 3) la dimension culturelle du message publicitaire dans l'acte de communication. Les étudiants sauront comment la publicité communique avec son récepteur. Ils seront capables de comprendre, de traiter et d'évaluer les informations données dans la publicité.

## FES 246 Littérature et Bande Dessinée

Etude des rapports dynamiques entre la bande dessinée et la littérature via des analyses d'oeuvres, principalement du XXe siècle. Les deux arts privilégient la narration à l'intersection du textuel et de l'iconique. Pour mieux comprendre l'interaction du texte et de l'image, il faut examiner autant des codes (graphiques, iconiques et idéographiques), que des structures (visuelles de récit case, bande, blanche-, son organisation). Les étudiants auront également l'occasion d'étudier des aspects techniques mis en oeuvre pour la création d'une BD ou d'un roman graphique, liés à la transmédialité, ou utilisation de plusieurs média, afin de créer une oeuvre nouvelle.

## FES 265 Théâtre Européen, Moderne et Postmoderne

On étudie les rapports des oeuvres dramatiques avec les principaux mouvements littéraires et artistiques qui ont influencé le théâtre moderne et postmoderne au cours du XXe siècle jusqu'aujourd'hui en Europe. Précisément, on interroge comment l'oeuvre dramatique accueille les grands principes de la modernité et de la postmodernité tout en les soumettant aux régles du genre.

## FES 282 La Bataille des Langues en Europe

Le cours entend montrer que les enjeux linguistiques sont simultanément des enjeux politiques. S'il faut se garder de trop facilement étiqueter de «nationaliste » I'attachement des peuples à leur langue lorsque c'est parfois tout ce qui leur reste pour «faire société» à l'heure de la libre circulation des capitaux, des biens et des services et de la course planétaire aux profits, il faut aussi se garder des réflexes identitaires face à l'ouverture vers le monde. Le cours examine des études de cas particuliers (Belgique, pays basque espagnol, Malte), comme des luttes que se livrent des langues européennes dominantes entre elles.)

## FES 290 Introduction to European Literature

European Literature, starting with the Homeric epics, was particularly developed after the invention of typography. Beyond the literature and famous writers of Europe presented in the course through their representative texts, the course focuses on the issue of the existence of a "European literature". Also, which forms or principles are common, representing a European conscious or unconscious culture?

## FES 300 Lexicologie - Lexicographie

I- Communication; Sens; Signe linguistique, II- Lexicologie: Types de dictionnaires; La définition dans les dictionnaires de langue, III- Les analyses du sens lexical: analyse sémique ou componentielle, Prototypes et stéréotypes, IV- Relations sémantiques: hyperonymie et hyponymie, synonymie, antonymie, co-hyponymie, V- Polysémie et homonymie, métaphore, métonymie, synecdoque, VIFormations des mots. Les étudiants maîtriseront les concepts élémentaires de la sémantique lexicale. Ils sauront 1) définir les différents types de dictionnaires et les différents types de définitions; 2 ) expliquer les procédés de formation des mots.

## FES 301 Sociolinguistique

Les notions traitées dans ce cours sont les suivantes: langue et usage; norme endogène et norme exogène; variable, variété et variation; l'enquête sociolinguistique: objectifs, outils, méthodologie; la variation géographique (langue, dialecte, géolecte, topolecte, parler et patois); I'exemple d'un topolecte particulier; le sociolecte (prestige latent et prestige apparent); le sexolecte; les situations de contact des langues; la diglossie et le bilinguisme; le créole, le pidgin et le sabir; les aspects du système linguistique d'un créole francophone; la planification linguistique et son importance politique dans la francophonie.

## FES 302 Analyse Linguistique du Texte

Les notions traitées dans ce cours sont les suivantes: analyse du texte; texte et discours; textualité; les rapports à l'intérieur de la phrase et en dehors de la phrase; la cohésion; la cohérence; la progression de l'information:
thème et rhème; les types de progression thématique. Les étudiants sauront que les catégories grammaticales diffèrent des catégories textuelles, que des problèmes grammaticaux 'traditionnels' peuvent être diversement abordés; que la mise en texte requiert des compétences particulières. Ils sauront repérer les règles textuelles qui organisent un texte et les appliquer dans leurs propres productions.

## FES 303 Phonologie

Les points traités seront: phonétique articulatoire; phonétique combinatoire; interprétation phonologique de données; initiation à la théorie phonologique via les deux modèles structuraliste et générativiste. Les étudiants connaîtront les bases de la phonétique articulatoire, de la phonétique combinatoire et des phénomènes prosodiques. Ils sauront décrire les sons du français d'un point de vue articulatoire et connaîtront les oppositions phonologiques du système français. Sur la base d'un corpus, de consignes précises et en appliquant les deux modèles théoriques expliqués, ils pourront résoudre des problèmes phonologi-ques présentés dans le cours.)

## FES 306 Linguistique Générale

Qu'est-ce qui distingue la philosophie, la logique et la grammaire de la linguistique? En partant du principe que la grammaire est aussi ancienne que l'écriture ou la poésie, on peut se demaner pourquoi la linguistique n'existe que depuis la fin du XIXe siècle-début du XXe. Comment arrive-t-on en sciences du langage? Le cours examine ainsi divers aspects de la sémantique, de la syntaxe, de la léxicologie, de la morphologie, de l'acquisition des langues. Le cours précise les bases de la linguistique théorique tout en la différenciant de la linguistique appliquée.

## FES 309 Histoire de la Linguisique

Le premier objectif du cours est d'éveiller l'étudiant à I'histoire de la linguistique. A travers l'étude de documents pédagogiques et authentiques variés seront présentées les grandes étapes de l'histoire de la linguistiques qui observe trois époques. Depuis l'Antiquité et jusqu'aux Lumières, la réflexion linguistique existe certes, mais reste soumise aux préoccupations qui lui sont étrangères. Au fil du XXème siècle et jusqu'à Saussure, la linguistique s'émancipe et s'institutionnalisme en devenant une discipline universitaire autonome. Après Saussure, I'histoire de la linguistique du XXème siècle s'énonce en termes d'écoles, de théories et de programmes de recherches. Enfin l'étudiant sera amener à approfondir les domaines ou les connaissances en linguistique fondamentale (phonétique, phonologie, lexicologie, morphologie, syntaxe, sémantique, pragmatique).

## FES 310 Langue, Histoire et Société

Les notions traitées seront: les familles de langues du monde, le groupe indo-européen; la formation de la Romania et de l'Europe; le substrat et le superstrat; principes et lois de phonétique historique et leur application aux voyelles et aux consonnes; évolution morphologique du syntagme nominal; historique de l'orthographe; tradition lexicographique. Les étudiants sauront expliquer les changements du système de la langue française et certaines évolutions phonologiques précises; expliquer des exemples d'évolution morphosyntaxique du latin vulgaire au français moderne; comprendre les singularités de la langue française mais aussi connaître les éléments communs aux autres langues latines.

## FES 325 European Literatures

This course stems from the fields of Comparative Literature and Literary Theory. The first part is theoretical and offers a brief account of fundamental concepts. The second part focuses on more specific issues such as the establishment of national literatures in Europe, the emergence of the 'great authors', the appearance and disappearance of certain texts in various canons, the creation of a European literary corpus and its importance in the ideological colonization of the non-Western world, as well as its problematization within the postcolonial paradigm and its consequences on the overall readability of non-European literary production.

FES 330 L'intégration Européenne (Module Jean Monnet)
The course is a historical and thought-provoking presentation of the European construction, after an introduction, covering the genesis and evolution of the European concept from Antiquity to the nineteenth century. Furthermore, on the basis of a body of literary texts (Moschos, Podiébrad, Camões, Alexis Léger, Jean Monnet), the foundations of European integration since 1950 are analysed, as well as institutions and current EU policies. Cross-cutting issues are: the theory of climates, the christianitas, and the European identity. The course is designed for students to acquire knowledge that allows not only to take an active part in the new social, cultural, political and economic European environment, but to better understand and positively criticize it.

## FES 338 Europe and Liberalism

The emerge and establishment of liberal regimes and the transition from the feudal to liberal societies and economies in the European continent coincide with the development of literature, arts, and sciences, the Enlightenment and the Industrial Revolution, human rights and universal suffrage, all of which lead to world domination by the European states. European power proved to be the verita effettuale of the modern liberal
system. The course will examine the basic theoritical, political and socio-economic processes that followed the rise of liberalism from Machiavelli and Thomas Hobbes to Max Weber, Hannah Arendt and Raymond Aron. Particular emphasis will be given on French liberalism of the 19th and 20th century (Tocqueville, Constant, Bastiat).

## FES 340 Littérature du XIXe siècle

Le cours s'intéresse aux grands mouvements littéraires français qui ont vu le jour au XIXe siècle tels le romantisme, le réalisme, le naturalisme. Il analyse leur maturation, leurs grands moments et leur mutation dans une approche qui entend montrer des schémas thématiques et stylistiques transversaux. L'étude des grands mouvements littéraires du XIXe siècle français dans leur division en genres cherche à mieux rendre compte des genres nouveaux ou renouvelés au cours de la période étudiée et de l'interrogation qui les accompagne. Plus globalement, elle permet de mettre I'accent sur ce qui prépare la modernité littéraire.

## FES 342 Littérature de la Renaissance

Le cours se propose de suivre lévolution de la littérature française à travers la nouvelle vision anthropocentrique établie par l'humanisme; de faire valoir les rapports entre littérature et idéologie qui passent par le questionnement religieux de la Réforme face au catholicisme; d'étudier les genres littéraires à la lumière de la redécouverte de l'Antiquité (formes poétiques fixes, rhétorique, lyrisme, textes moralistes) et au cours de leur métamorphose (le grotesque chez Rabelais, I'essai de Montaigne, etc.). Le cours a pour objectif d'apprendre aux étudiants à lire des textes anciens en mettant à profit les analyses contemporaines.

## FES 343 Littérature du XVIIIe siècle

Le cours met l'accent sur la force subversive des textes littéraires et philosophiques des Lumières. Outre l'extrême variété du genre romanesque (romans picaresques, d'apprentissage social, de mœurs, érotiques, exotiques, etc.), sont examinées ses différentes formes (épistolaire, autobiographies fictives ou réelles, récits d'apprentissage rétrospectifs, discours dialogués). Les Lumières engendrent aussi toutes sortes de démythifications, dans le domaine de la littérature comme dans celui des idées, donnant naissance aux notions fondamentales de la philosophie et de la science politique. Le cours a pour objectif de former l'esprit critique par son spectacle: critique de la société, des genres et du discours critique lui-même.

## FES 347 La France devant les grands Défis de I' UE

Comment le citoyen français d'aujourd'hui perçoit-il «l'union sans cesse plus étroite entre les peuples européens» du traité de Lisbonne? Quels sont les nouveaux défis de l'Union européenne? Quelle est la
place de l'Union européenne dans la cartographie mondiale? Le cours entend étudier certains des grands défis européens (migrations, environnement, terrorisme, paysage politique) auxquels fait face un des pays fondateurs de l'Union européenne, la France.

## FES 350 Littérature Comparée

Le premier volet de ce cours est théorique: définition de la littérature comparée et présentation de son évolution, de ses notions-clés et de ses points de repère théoriques (l'intertextualité, la réception, l'horizon d'attente, l'interculturalité, les géographies littéraires, etc.). Le second volet propose des textes qui se prêtent à une lecture comparatiste. Le cours a pour objectif de montrer comment la critique littéraire établit des relations de différence et de similitude entre les textes; de mettre en question l'«objectivité» des divisions entre les littératures nationales et les genres littéraires, mais aussi entre des discours différents et des systèmes sémiotiques distincts.

## FES 360 Didactique du FLE

Présentation de concepts centraux à la discipline du FLE, en particulier: position du FLE dans la didactique des langues étrangères et secondes; FLE et sciences de I'éducation; FLE et sciences du langage; la langue comme objet d'enseignement et d'apprentissage; la variété des situations d'enseignement et d'apprentissage; les conditions d'appropriation d'une langue étrangère; la salle de classe et ses acteurs; les compétences fondamentales qui structurent les programmes d'apprentissage. Examen critique de différentes méthodologies et approches propres au domaine de la didactique des langues: par exemple, méthode dite «Grammaire Traduction», méthode directe, méthode audio-orale, méthode structuro-globale audiovisuelle, approche communicative, théorie socioculturelle (Vygotski), nouveaux modèles interactionnistes pour l'acquisition des langues étrangères (focalisation sur la forme, négociation du sens, etc.).

## FES 391 Intellectual Movements in Europe: Renaissance, Reform, Enlightenment

While the great movements between 1400 and 1800 Renaissance, Reformation and Enlightenment - are considered cradled in, respectively, Italy, Germany and France, their reality was pan-European. A multiplicity of thinkers and written works brought about incalculable changes. Among these, Humanism placed the individual in a new system of values, social and political. Medieval authority met increasing opposition from emancipatory concepts and movements that often derived from Greek and Roman philosophy, literature and art. New concepts of the cosmos and the world emerged, with a strong anthropocentric predilection. The course will study deep changes in philosophical, literary, political and social dimensions.

## FES 392 L'archipel de la Pensée Européenne

This course studies the theoretical constructions that support the political and social establishment of "Europe" and links them to the historical evolution of its people. The course focuses on the theory of the state by Hobbes, on ideas emerging from the three revolutions (English, American, French), which established democracy in Europe and the world, and also on theories of liberalism and socialism that put their mark on the 20th century. This course helps students to comprehend the role of philosophical theories in political and social changes and to familiarise with the idioms of European intellect.

## FES 396 La France de Ille République face I' Allemagne

Le but du cours est d'amener les étudiants à mieux comprendre l'évolution générale de la société française sous la Ille République et de faire le lien entre les évènements politiques, les mouvements sociaux, les arts et les idées. Il s'agit, en outre, de mesurer la place de la France en Europe et dans le monde, et les réponses apportées par la France et l'Allemagne aux nombreux défis de cette période.

## FES 411 Discours, Société et Idéologie: les Media Français

Politics is one of the social fields where discourse practices are the most prevalent: political knowledge is, by definition, based on ideology and political ideologies are reproduced, to a great extent, through discourse. The course begins from the framewor of the theory of announcement. It studies and analyses data including articles from French press, blogs and internet forums, regarding political and social events.

## FES 420 Discours dans le contexte des Lumières Européennes

The course follows the interpretation of European Enlightenment in the homonymous work of the late Panayotis Kondylis. Kondylis analyses the multiple ideas and intellectual schemes trending in the field of the European spirit from the early and late Enlightenment. The writer analyses the way that the old Christian and God-centric world icon is replaced by contemporary. This course will focus on four areas: science, society, economy and politics. For each one of these areas, we will examine the carriers of change, their designation as structural points of the new world icon, as well as the new scientific, social, economic and political reality, as set in the new historical framework. The course forms part of the broader philosophical analysis of the genesis of the dominant principles of European contemporaneity.

## FES 425 Economy as Bio-politics in Foucault

The concept of raison d'Etat (always in French in international bibliography) implies a particular understanding of the political act as independent or contrary to the applicable ethics, laws and rules. Its origins can be traced to the Renaissance in Italy and attributed to the Florentine

Niccolò Machiavelli (1469-1527). The term ragion di Stato per se was advanced by the Venetian Jesuit Giovanni Botero (1544-1617) in 1598 with a very significant departure from the philosophy of Machiavelli, whom he was conflicting. The ragion di Stato was not about increasing the power of the Prince by military means, but the strengthening of the State through the active support of the national economy, conceived as the capacity of the labor force for production of goods and wealth generating taxes to state coffers. This does not mean that the State renounces deception and violence in trying to strengthen the economy. The French philosopher Michel Foucault (1926-1984), for whom, during the modern period, the logic of life (economy) supersedes the logic of death (politics), analyses this fundamental change in the orientation of the modern State in the general study of the History of Sexuality in the West (1976-1984), by introducing the term of bio-politics.

## FES 428 Introduction to Theories of Beauty

"Beauty" is a fundamental category in European art and literature. The course gives a short introduction to the long history of the term from antiquity to modernism. To this end, extracts of the key historical texts by Ovid ("Metamorphoses"), Plato ("Phaedrus"), Schiller ("On naive and sentimental poetry", 1795), Darwin ("The Descent of Man and Selection in Relation to Sex", 1871) and Freud ("Civilization and its discontents", 1930) will be dealt with Examples drawn from visual arts and literature will be discussed and analysed in detail.

## FES 430 Cinéma: La Tradition Européenne

L'Europe n'est pas seulement le continent qui a vu naître le cinéma avec les frères Lumière (France, 1895), mais également le lieu de naissance des courants cinématographiques les plus importants d'un point de vue artistique: le cinéma expressionniste allemand, la première avant-garde, le cinéma surréaliste, le cinéma soviétique expérimental, l'école scandinave, le néoréalisme italien, le Free cinema britannique, la Nouvelle Vague française, le nouveau cinéma allemand, le Dogme95 danois, etc. Tout aussi importants sont les metteurs en scène et les acteurs exilés à Hollywood avant et pendant la deuxième Guerre mondiale.

FES 431 Les Misérables: un chef-d'œuvre littéraire, 50 films
Entre littérature et cinéma, tous deux arts de la narration, les relations sont souvent envisagées à travers le prisme de l'adaptation des textes littéraires, dont la pratique a alimenté des débats parfois très vifs. Les Misérables (1862) de Victor Hugo, roman social du XIXe siècle qui n'a pas perdu de son actualité, a inspiré une riche filmographie dès 1897 avec le court métrage des frères Lumière Victor Hugo et les principaux personnages des Misérables. Depuis, plus de cinquante réalisateurs ont adapté le roman, ce qui permet d'examiner les questions relatives à l'adaptation des œuvres littéraires au cinéma: Un film
peut-il recréer, sous de nouvelles formes, ce que l'on croit spécifiquement littéraire? Cherche-t-il à transcrire ou à interpréter sa source? Questions différemment abordées par les cinéastes, qui feront l'objet d'analyses lors du cours.

FES 432 La Condition Humaine dans la Culture de XXes.
Au XXe siècle, écrivains, penseurs et artistes interrogent la condition humaine à travers des formes de représentation qui surprennent leurs récepteurs. Les grands événements historiques et politiques, comme les deux Guerres mondiales, installent dans la création littéraire des thèmes comme l'espace du vide, la mort, l'attente, la fin , l'absurde. Les oeuvres étudiées interrogent la relation de la mémoire avec l'oubli, le vide de la connaissance, l'absurdité de la conditon humaine.

## FES 433 Transformations du Texte Littéraire

Le cours propose l'examen du processus de la transformation du texte littéraire en d'autres formes de représentation (adaptation télévisuelle, théâtrale ou scénique, cinématographique, plastique, musicale, etc.) et comment ce processus met en lumière les nouveaux rapports entre texte et transformation, et la création d'une oeuvre nouvelle. L'analyse des oeuvres littéraires et leurs diverses adaptations initiera les étudiants aux principaux mécanismes de création littéraire, à la question de la réécriture, de l'adaptation, de la transponsition et de la transmédiation.

## FES 439 Littérature et Peinture

Ce cours examine les rapports entre littérature et peinture depuis l'antiquité gréco-romaine jusqu'à nos jours, à l'aire du numérique, à travers des grands mouvements esthétiques européens. L'approche transversale permettra aux étudiants de saisir les spécificités de la littérature et de la peinture à l'intersection du visible et du lisible, à travers l'analyse des textes théoriques critiques ainsi que l'analyse des textes littéraires et picturales.

FES 444 Introduction à la Théorie du «Sublime»
The "Sublime" is a main category in European Art. The course intends to make an introduction to the history of "sublime" from antiquity to post-modernism. For this reason, we will read excerpts from classical texts, such as the dissertations of Longinus ("Of the height of eloquence", 1st century B.C.), of Boileau ("Traité du sublime», 1674), of Burke («A Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful», 1757), of Kant («Kritik der Urteilskraft», 1790) and of Lyotard («Le sublime et l'avant-garde», 1988). Samples of European Literature and art will be also analysed, for the comprehension and critique of this aesthetic theory.

FES 483 L'art Européen et la Mythologie Grecque
Ancient Greek myths are an integral part of European culture. They enrich literature, theatre, films, music and visual arts. Why are we still interested in ancient myths? Why do they not lose their charm? This course studies different approaches to this issue. It goes back to the beginnings of the scientific exploration of ancient mythology. Changes and transformations of the mythical tradition will be studied, as well as newer approaches in the fields of literary the interpretation, psychanalysis and semiotics. Finally, the course addresses the broader relationship between myth and philosophy, religion, society and politics.

## FACULTY OF HUMANITIES


www.ucy.ac.cy/tms/en

## DEPARTMENT OF TURKISH AND MIDDLE EASTERN STUDIES

Turkish Studies deal with Turkish and other Turkic languages, history, literature and cultures, from the first written evidence of the Turkish language in the 8th century up to the present. Various subdisciplines of Turkish Studies have emerge. Turcology or Turkic Studies are concerned with the entire spectrum of Turkish languages and literatures. Ottoman Studies are devoted primarily to the languages, history and culture of the Ottoman Empire (14th20th centuries). Modern Turkish Studies focus on the politics, literature, economy and society of Turkey in the 20th century. Islamic Studies are, on the one hand, an integral part of Ottoman Studies and Modern Turkish Studies, and on the other hand serve as a connecting link to Middle Eastern peoples (mainly Arabs and Iranians), their languages and cultures. Turkish studies also include the study of the Balkan peoples in relation to the Ottoman and Turkish world.

Turkish Studies at the University of Cyprus cover many of the abovementioned areas of Turkish and Middle Eastern Studies. Thematic emphases are set by the local and regional contexts and especially that of the Turkish Cypriot community, as well as the wider region; by the interests and orientation of the department's staff; and by the employment prospects and possibilities for future academic work for the department's graduates.

## CHAIRPERSON

Theocharis Stavrides

## VICE-CHAIRPERSON

Börte Sagaster

## ASSOCIATE PROFESSORS

Christiane Bulut
Michalis N. Michael
Börte Sagaster
Theocharis Stavrides
ASSISTANT PROFESSOR
Gulshen Sakhatova

## LECTURERS

Nikos Moudouros
Ahmet Yikik

## PROGRAMME OF STUDIES

The Department's programme leads to a B.A. Degree in Turkish Studies, which will emphasize one of the two directions:
a) History and Politics
b) Linguistics and Literature.

The courses are divided into: Core Courses and Direction Courses.

## I. CORE COURSES

## Language Courses

The aim of the language courses is to teach the Turkish language in such a way that students can converse in Turkish, can translate from Turkish to Greek and vice versa, and can easily read academic literature and other publications written in modern Turkish. The linguistic training also includes instruction in the reading of Ottoman Turkish. The successful completion of the Turkish language courses of the first four semesters (Turkish I-IV) is a prerequisite for registration in the following specialized language courses ( 14 courses, in total 86 ECTS).

## General Introductory Courses

These courses provide concise coverage of the fundamental subjects in the main field (Turkish Studies). Students study the causes and circumstances of the rise and spread of the Muslim religion as well as the appearance of the Ottomans, the formation and subsequent decomposition of the Ottoman Empire, the formation of the Turkish State and its history up to the present. The courses in Ottoman and Turkish Literature aim to give students an overview of the most important literary works and authors (8 courses, in total 49 ECTS).

## II. DIRECTIONS

The Direction courses offer students the chance to deepen their knowledge in one of two fields:
a) History and Politics
b) Linguistics and Literature.

Students are obliged to choose a direction at the beginning of the sixth semester.
There are 10 compulsory courses in each direction, that is 63 ECTS in total, and two restricted elective courses, that is 12 ECTS in total. The successful completion of the relevant introductory courses in the first five semesters is a prerequisite for registration in the courses with the title "Themes .... Likewise for registration in the Seminars students must have passed those courses entitled "Themes..." in the same direction. Students of both directions are entitled to take one restricted elective
course from the other direction (including the compulsory courses of the other direction). Furthermore, there are restricted elective courses which are common to both Directions and from which students can select one (6 ECTS).

The undergraduate dissertation is considered a restricted elective course that counts for 12 ECTS ( 6 ECTS in each of two semesters).

## DEGREE REQUIREMENTS

To obtain the B.A. Degree in Turkish and Middle Eastern Studies students must complete 240 ECTS, which are divided as follows:

| Courses | ECTS |
| :--- | ---: |
| 20 Core Courses |  |
| (Language/General Introductory Courses) | 135 |
| 12 Direction courses | 75 |
| 3 Foreign Language Elective Courses | 15 |
| 3 Free Elective Courses | 15 |
| TOTAL: $\mathbf{3 8}$ courses | $\mathbf{2 4 0}$ |

## DESCRIPTION OF COURSES

Compulsory Courses and Direction Compulsory Courses

TUM 100 Grammar \& Syntax I (11 ECTS)
The course is offered to those students of the Department who have no previous knowledge of the Turkish language. In the framework of the course, the special symbols of the alphabet, the phonetics, the phonology, the morphology and the syntax of the Turkish language, with explanation of grammatical categories based on examples and exercises, are described. From the point of view of methodology, content and technique, the course is linked to the course TUM 106 Language Exercises I. It aims to give students a basic level of grammar and syntax.

## TUM 101 Grammar \& Syntax II (11 ECTS)

Prerequisites: TUM 101 and TUM 106
The course is a continuation of the course TUM 100 Grammar and Syntax I and is offered to students of the Department who have successfully completed the courses TUM 100 Grammar and Syntax I and TUM 106 Language Exercises I. In the framework of the course, and bearing in mind the needs of the course TUM 107 Language Exercises II, study of the morphology and syntax of Turkish with examples and exercises is continued. The aim of the course is to give students an intermediate level of knowledge of the grammar and syntax of the Turkish language. It is a six-hour course on a weekly basis.

## TUM 106 Language Exercises I (8 ECTS)

The course is offered to those students of the Department who have no previous knowledge of the Turkish language. From the point of view of methodology, content and technique, the course is linked to the course TUM 100 Grammar and Syntax I. It seeks to give to the students a basic vocabulary and practice in the reading, comprehension and composition of simple texts. Emphasis is placed on communication in Turkish through practice in the oral use of the language, using simple dialogues and audiovisual means. It is a six-hour course on a weekly basis.

## TUM 107 Language Exercises II (8 ECTS)

## Prerequisites: TUM 100 and TUM 106

The course is a continuation of the course TUM 106 Language Exercises I and is offered to those students of the Department who have successfully completed the courses TUM 106 Language Exercises I and TUM 100 Grammar and Syntax I. In the framework of the course and bearing in mind the needs of the course TUM 101, "Grammar and Syntax II", the enrichment of vocabulary, practice in reading and in the oral use of language, the comprehension and the composition of texts are continued. The aim of the course is to help students to reach an intermediate level knowledge of the written and oral forms of the Turkish language. It is a six-hour course on a weekly basis.

## TUM 120 Introduction to Turkish Studies and Academic Writing (6 ECTS)

The course aims to familiarize students with the spectrum of Turkish Studies including historical, literary and religious topics and the historical development of the discipline. Participants will become acquainted with research tools such as encyclopedias, manuals, scholarly journals and bibliographies and the major centres of Turkish Studies. Additionally, the course aims to prepare students for academic writing by introducing to them the techniques of writing an academic essay, how to reference their work and the process of searching and writing down a bibliography

## TUM 122 Introduction to Islam (6 ECTS)

The course examines the origins and development of Islam and familiarizes students with the fundamentals of Islamic religious beliefs and practices as well as the relationship of religion and politics.

## TUM 200 Grammar and Syntax III (6 ECTS

## Prerequisites: TUM 101 and TUM 107

The course is a continuation of the course TUM 101
Grammar and Syntax II and is offered to those students of the Department who have successfully completed the
courses TUM 101 Grammar and Syntax II, and TUM 107 Language Exercises II. In the framework of the course and bearing in mind the needs of the course TUM 206 Language Exercises III, the study of morphology with emphasis on the syntax of composite sentences is continued. The aim of the course is an advanced level of knowledge of the grammar and syntax of the Turkish language.

## TUM 201 Grammar and Syntax IV (5 ECTS

## Prerequisites: TUM 200 and TUM 206

This class enables the transition from the grammatical and syntactical exercises of previous classes to the standard and therefore more difficult texts to be encountered in subsequent semesters. Texts of intermediate difficulty from a variety of publications will be studied, for example short stories, articles in journals and sections of books. Special attention will be devoted to a number of grammatical phenomena, which either are of unusual interest or else are exceptionally difficult for the students to understand and master. The course is to be taken by students of the Department who have passed TUM 200 Turkish Grammar III and TUM 206 Language Exercises III.

## TUM 206 Language Exercises III (7 ECTS)

## Prerequisites: TUM 101 and TUM 107

The course is a continuation of the course TUM 107 Language Exercises II and is offered to those students of the Department who have successfully completed the courses TUM 107 Language Exercises II and TUM 101 Grammar and Syntax II. In the framework of the course and bearing in mind the needs of the course TUM 200 Grammar and Syntax III, the enrichment of vocabulary, the composition of texts, the reading and comprehension of more difficult texts, as well as the practice in oral use of the language are continued. The aim of the course is to help students to reach to an advanced level in the use of the written and oral forms of the language.

## TUM 210 Translation Turkish-Greek (6 ECTS)

## Prerequisites: TUM 101 and TUM 107

The course is offered to those students who have successfully completed the courses TUM 101 Grammar and Syntax II and TUM 207 Language Exercises II. The course focuses on practising the technique of translating Turkish texts of different types and origins into Greek. Emphasis is placed on comprehension of grammatical categories and syntactical structure. The aim of the course is to familiarize students with the translation of Turkish texts of advanced level.

TUM 220 Introduction to Turkish Linguistics (6 ECTS)

## Prerequisite: TUM 101

The course examines the basic elements and the current theories of Turkish linguistics. After an introduction to
general linguistics, the following elements are taught: methods of analysis of the Turkish language (concentrating on the most commonly accepted); synchronic description of phonology, morphology and syntax; lexicography; dialectology; inter-linguistic contact; bilingualism; Turkish language policy. Examples of these phenomena taken from texts in the modern and other forms of the language are used in teaching.

## TUM 230 Ottoman Language (7 ECTS)

## Prerequisite: TUM 101

To register for this course, students must have passed the Turkish language courses of the first three semesters. Students are taught to write the Arabic script, and then learn the vocabulary, the phonology and the morphology of Turkish in the Ottoman period. The aim of the course is acquisition of the students' ability both to read and to write simple texts in Ottoman.

## TUM 240 Introduction to Modern Turkish Literature

 (6 ECTS)
## Prerequisites: TUM 101 and TUM 107

This course provides a grounding in the main developments, categories and authors of Turkish literature of the 19th-21st centuries. Students are given the opportunity to study and analyse small text passages in Turkish.

## TUM 251 Introduction to Ottoman History (6 ECTS)

The course consists of an introduction to the history of the Turkish presence in Asia Minor and to that of the Ottoman Empire. It begins with an account of the Turks' arrival in Asia Minor from Central Asia and Iran and continues with a survey of the pre-Ottoman states, and particularly that of the Seljuks. It covers essential aspects of the origins of the Ottoman Empire, and its expansion and consolidation in Asia Minor, the Balkans and the Middle East (14th - 16th centuries). Consideration will be given to the principal institutions of this period and to the Ottoman decline of the following period ( 16 th -18 th centuries) and the causes of the decline. The Empire's territorial contraction in the latter period will also be described. The Ottoman reforms which took place from the late 18th to the early 20th century and the consequent changes in Ottoman institutions, will be examined, especially those of the Tanzimat period (1839-78).

## TUM 260 History of Turkey (6 ECTS)

This course offers an introduction to the historical roots of the present Turkish state, to the changes and developments of the last decades of the Ottoman Empire's existence and to the history of the Turkish state from its formation to the present. After a brief reference to the Ottoman legacy, the genesis of the Turkish Republic,
the formation of the nation-state and political developments are discussed. Important themes are the Kemalist reforms, the transition to the multiparty system in 1950 and the changes in Turkish society within the last century. We undertake a survey of the various elements of Turkey's population and a discussion of the emergence and role of political Islam in the last four decades. A brief introduction to the sources for the history of modern Turkey is included in the course.

TUM 301 Language of the Media (Audiovisual) (5 ECTS)
Prerequisites: TUM 200, TUM 206 and TUM 316
A language course based on the analysis of audiovisual material. TV advertisements, movies, documentaries, news broadcasts, music clips are used as sources to develop listening and understanding skills through an acquaintance with the living colloquial language in the context of Turkish culture.

TUM 302 Themes in Turkish Linguistics (7 ECTS)

## (Linguistics and Literature Direction)

Prerequisite: TUM 220
The course examines various issues of Turkish linguistics. The methods of linguistics are applied to phenomena in the fields of morphonology, morpho-syntax and semantics. Elements of pragmatics and language acquisition are studied, as are the sociolinguistic aspects of Turkish.

## TUM 304 Main Genres of Modern Turkish Literature

 (6 ECTS)
## (Linguistics-Literature Direction)

This course introduces the main genres of modern Turkish literature - prose, drama and poetry - and their key representatives. The course is aimed at students who have basic knowledge in Turkish.

## TUM 305 Turkey in the World (6 ECTS)

(History - Political Science Direction)
Turkey is at a strategic position at the crossroads of regional systems of critical importance for the whole world. The Middle East, Europe, the Caucasus and Central Asia, are regions which, to various degrees, influence and are influenced by Turkey's position. Turkey itself has historical, social, political and cultural relations with all these regions because of the legacy of the Ottoman Empire. At the same time, Turkey is a member of NATO and has the second largest army of the Alliance. Throughout the years, despite many problems, Turkey still maintains relations with the European Union. Turkey is ranked among the world's twenty largest economies and seeks to develop multi-faceted economic relations with many parts of the world. In such a context, the course aims at analysing Turkey's position in the world from 1923
to the present day. The course analyses not only the political and economic development of Turkey through its interaction with its region, but also with the global system. At the same time, the course examines the various political and ideological perceptions of the Turkish state with regards to Turkey's relations with the different states in the region, as well as with international organizations.

## TUM 310 Translation Greek-Turkish (6 ECTS)

## Prerequisites: TUM 101 and TUM 107

The course is offered to those students who have successfully completed the course TUM 210, "Translation Turkish-Greek". Students practise the techniques of the translation of simple texts from Greek to Turkish. Emphasis is placed on the recasting of the grammatical and syntactical categories of Greek in Turkish. The aim of the course to familiarize students with the translation of texts into Turkish.

TUM 316 Dialogue (6 ECTS)

## Prerequisites: TUM 101 and TUM 107

During this course, students are trained and given the opportunity to practise and develop their speaking and communication skills in the Turkish language.

## TUM 322 Cyprus During Ottoman Rule (6 ECTS)

The aim of the course is to study the history of Cyprus during the Ottoman period (1571-1878) and to integrate developments on the island into the Ottoman and broader context. During the semester, the basic structures of the Ottoman administration on the island, the changes in these structures, especially in the 18th and the 19th centuries, as well as the impact of the changes on the political, economic and social level will be examined. Developments and changes in the island during the 19th century will be analysed in the broader context of developments in the Ottoman state and the changes brought about by the impact of reforms.

## TUM 340 Introduction to Ottoman Literature (7 ECTS)

## Prerequisites: TUM 101 and TUM 107

In this course, basic knowledge on the main developments, categories and authors of Ottoman literature of the 14th20th centuries is given. Students read short poems and text passages in Ottoman as well as transcriptions of Ottoman literary works.

## TUM 342 Literature and Society in Turkey

## (Linguistics and Literature Direction)

Modern Turkish literature dates back to the 19th century. It developed in interaction with social and political developments and was therefore from its beginning a barometer for the state of Turkish society. In this course, texts are read and discussed that reflect certain social and
political developments, such as the National Literature at the beginning of the Republican period, the Village Literature in the nineteen fifties to seventies, and the political novels of the nineteen seventies and later. The course is aimed at students who are already able to read some Turkish, as we will be reading texts in the original form.

TUM 350 Themes in the History of the Ottoman Empire (7 ECTS)
(History - Political Science Direction)
The aim of the course is to help students gain a deeper knowledge of particular aspects of the Ottoman Empire. It is based on the study and analysis of Ottoman and other sources. The themes are focused on Ottoman institutions and the changes within them.

## TUM 380 History of Middle East (6th-20th century) (7 ECTS)

(History - Political Science Direction)
The course provides a broad survey of major events and themes in the history of the Middle East from the emergence of Islam until the end of the 20th century. It gives an account of the principal Islamic empires and dynasties (e.g. Umayyads, Abbasids, Mamluks, Safavids), discusses the encounter of the Middle East with the Crusaders, focuses on the character of Ottoman decline in the Middle East and concludes with a look at the changed map of the region in 19th and 20th centuries.

## TUM 402 Morphology of the Turkish Language (6 ECTS)

(Linguistics and Literature Direction)
Prerequisite: TUM 220
The application of the methods of linguistics, including theoretical linguistics, to the Turkish language; and the use of these methods to elucidate the language's morphological phenomena.

## TUM 404 Issues in Turkish Syntax (6 ECTS)

(Linguistics and Literature Direction) Prerequisite: TUM 220

The aim of the course is to provide a wider and more detailed study of the syntactical phenomena of the Turkish language and at the same time to familiarize students with the bibliography on Turkish syntax in Turkish and other languages.

TUM 410 Themes in Modern Turkish Literature (7 ECTS)
(Linguistics and Literature Direction)
Prerequisite: TUM 201
The course offers an in-depth examination of the main themes of modern Turkish literature. It is based on the reading of Turkish literary texts and essays. Specialized themes are: literature after the Tanzimat reforms, the influence of European romanticism and symbolism; realism; postmodernism in contemporary Turkey; the
literature of Turkish writers in exile; and literature in the theatre and cinema.

TUM 417 Seminar of Turkish Literature (6 ECTS)

## (Linguistics and Literature Direction)

Prerequisite: TUM 201
The seminar deals with one special aspect of Turkish literature, to be chosen by the instructor. The themes differ from semester to semester and have to be appropriate for an advanced level of students. The seminar is in Turkish. Students read and discuss texts of Turkish literary authors and secondary literature in Turkish.

## TUM 420 Turkish-Cypriot Literature (6 ECTS)

## (Linguistics and Literature Direction)

Prerequisite: TUM 201
The purpose of this seminar is to discuss aspects of Turkish-Cypriot literature which have come into being and been developed in consequence of the co-existence of Turkish-Cypriots with the Greek-Cypriot community and of their exposure to Greek-Cypriot and Ottoman culture and to that of Modern Turkey. To attend this seminar, students are required to have good knowledge of Turkish literature and civilization. Students are required to have advanced skills in both English and Turkish. The principal language of instruction is Turkish.

## TUM 425 Historical Grammar of the Turkic Languages (6 ECTS)

## (Linguistics and Literature Direction)

Prerequisite: TUM 220
This course offers a survey of the most important historical developments in the Turkic speaking world, connecting them to the formation of different language groups and their literary traditions from the first mentioning of the Turks in historical sources and the period documented in the inscriptions to the formation of the medieval Turkic-Islamic states and of present day nation states. The interaction between different groups of speakers of Turkic and non-Turkic background has resulted in a number of linguistic features that nowadays establish characteristic criteria for the classification of the Turkic languages. A basic knowledge of the historical connections is an important prerequisite for our understanding of the formation of these distinct languages and dialects and of the position of the Turkish language spoken in Turkey, in this language family.

## TUM 431 Seminar in Turkish Linguistics (6 ECTS)

(Linguistics and Literature Direction)
Prerequisite: TUM 201
One or more topics of the Course TUM 410 Themes in Modern Turkish Literature (e.g.: The Structure of Turkic, Applied Grammar, Historical Grammar, Dialectology and

Sociolinguistics) is presented with more in-depth analysis, using Turkish not only as a target language and in reading primary sources, but also as a language of instruction.

TUM 432 Literature and Politics in Modern Turkey (6 ECTS)

## (History-Political Science Direction)

The main objective of the course is to analyse and understand the contradictions and changes that characterize Turkey's political, economic and social life since the emergence of the Turkish Republic in 1923 until today. An important contribution of the course is to familiarize students with various analytical and theoretical tools in order to understand Turkey's political, economic and social development, as well as the broader transformation of the country as it evolves through the alternation of political and economic equilibria. At the same time, the main focus of the course is to connect cultural development, and especially literature, to Turkey's most important historical moments. Taking into account the complexity of literature, culture, identity and political process, this course aims at their creative interconnection and the identification of their fields of interaction. In this course, modern Turkish literature is a constituent part of the evolving ideological and political environment of modern Turkey. In this way, the course seeks to contribute to the understanding of the historical evolution of the country through the different cycles that end up in the same chain of knowledge. The bibliography and the sources of the course combine historical writings with the study of important literary works.

## TUM 450 Themes in the History and Politics of Turkey <br> (7 ECTS)

## (History - Political Science Direction)

This course analyses several themes of the lesson TUM 260 History of Turkey in greater depth. There is focus on the study of the Turkish polity (institutions and administration), governmental policies, and party politics. The legal system will also be examined. Students will read sources relevant to the various units.

## TUM 455 Greek-Turkish Relations

## (History - Political Science Direction)

The aim of the course is to analyse the relations between the Turkish and the Greek state from 1923 to the present. The course examines the historical context of GreekTurkish relations since the establishment of the Turkish state, the causes of the continuous friction between the two states, the external factors and the international context that affect the relations between them, and the reflection of the Cyprus problem in these bilateral relations. The course examines in depth various themes concerning Greek-Turkish relations, such as their legal dimension, the political developments within the two
states and how these affect relations between them, as well as the changes that the fluid international environment, especially after the end of the Cold War, imposes upon the development of these relations.

## TUM 463 Communal Relations in Cyprus (6 ECTS)

(History - Political Science Direction)
In this course, emphasis will be placed on communal relations in Cyprus beginning just before the Ottoman period, during the Ottoman period and after. Daily life, cultural and linguistic interaction, mixed marriages, change of religion, social and working relations, etc.

TUM 469 The Turkish-Cypriot Community (6 ECTS)

## (History-Political Science Direction)

After an introduction to the Ottoman rule of Cyprus, the development of the Turkish-Cypriot community in the 19th and 20th centuries will be studied. Special emphasis will be given to the population structure, social and religious institutions as well as to the emergence of nationalism within the community and its effects on the formation of the community's identity. The language of instruction is normally Turkish.

## TUM 471 Seminar in the History and Politics of Turkey

 (6 ECTS)(History-Political Science Direction)
Prerequisite: TUM 260
The seminar constitutes the most advanced level of the study of Turkish history and politics within the curriculum. It focuses on the development of economy and society in modern Turkey. Specific themes covered include the transition of Turkey from a largely agrarian country to a fast-developing nation, its social structures and developments (e.g. in the areas of population and education) and the role of religion in society.

## TUM 478 Seminar in Ottoman History (6 ECTS)

(History-Political Science Direction)
Prerequisite: TUM 251
The purpose of the seminar is to study various periods of the Ottoman history, as well as the most important institutions of the Ottoman state (13th-20th century). Within the framework of this class, and with the help of sources, various thematic units will be analysed (e.g. social structures, expressions of authority, aspects of administrative organization). Students will have to write a paper on one of the topics, which will be discussed in the course of the seminar. Pre-requisite for participation in the seminar is the successful completion of the courses "Introduction to Ottoman History" and "Themes in the History of the Ottoman Empire".

## RESTRICTED ELECTIVE COURSES

## I. LINGUISTICS-LITERATURE

TUM 405 Didactics of the Turkish Language (6 ECTS)
The course introduces students to certain aspects of applied linguistics, especially in the field of language acquisition, language assessment methods and curriculum development. These aspects of applied linguistics are then used to formulate approaches to the teaching of Turkish to different age groups.

## TUM 407 Turkish Dialectology (6 ECTS)

The course contains an introduction to the methods and problems of modern dialectology, particularly of dialect geography. Possibilities of classification of Turkish dialects in Anatolia and Rumelia will be discussed through isoglosses and other methods. After that, practical exercises with reading and linguistic analysis of dialect texts from different regions of Turkey will form the main part of the course.

## TUM 411 Old Anatolian Turkish: Its Linguistic Features and Literature (6 ECTS)

The course aims at familiarizing students with the amalgam of linguistic forms, which is the first written evidence of Turkish in Asia Minor: it appears in the 13th century during the Seljuk period. Old Anatolian Turkish ("Eski Anadolu Türkçesi"), as it is known, also includes early Ottoman ("Old Ottoman"). Old Anatolian's principal phonological and morphological features are taught, using modern Turkish as a comparison. Students will read literary texts of the 13th and 15th centuries.

## TUM 413 Literature of the Tanzimat (6 ECTS)

During this course, the literature written during the reforms of the 19th century is presented. This literature exhibits significant influences from Western Europe. It was in this period that the term Ottomanism became accepted in literature. After a review of the themes of Tanzimat literature (1860-1896), as well as the next movement, "New Literature" (of the magazine Servet-i Fünun), parts of the work of the main authors (i.e. Ahmed Midhat, Namık Kemal for the Tanzimat, Halid Ziya Uşaklıgil, Mehmed Rauf for the Servet-i Fünun) will be read and analysed.

## TUM 414 The Turkish Novel (6 ECTS)

A survey of the development of the novel in Turkish literature from the first works (influenced by European novels), which appeared in the mid-19th century, down to contemporary authors. Representative texts are selected for reading and analysis in the course.

## TUM 415 Contemporary Turkish Poetry (6 ECTS)

The course is an introduction to the works of the great contemporary poets from the 1930s to the 1970s. On the one hand, the most recent poets are examined from the perspective of tradition and on the other hand, the changes in poetic tone and form that have taken place in the last few decades. The structural elements of contemporary poetry are examined within various theoretical frameworks.

## TUM 416 Istanbul in Turkish Literature (6 ECTS)

In the history of Turkish literature, Istanbul occupies an important position. Poets praised the city for centuries. In the modern period, epochal changes have led to a changed perception of the metropolis on the Bosporus. Repeatedly, Istanbul has been the place where the Ottoman past and the West meet. In this course, important works from different periods are treated from the following points of view: Which aspects of the city are selected as central themes? What consequences does this have for the description of the city as regards content and form?

## TUM 423 The Turkish Cypriot Dialect (6 ECTS)

The aim of the course is the study of the Turkish Cypriot dialect in the framework of Turkish dialectology. Essential constituents of the course are: points of difference with the standard language, sociolinguistic aspects of the dialect's use and phenomena of language contact with the Greek Cypriot dialect. Oral and written texts in the dialect will be the base for linguistic analysis.

TUM 430 Bilingualism and Language Contacts ( 6 ECTS)
In this course, Contact Linguistics are applied to the study of linguistic phenomena observed in areas of contact and bilingualism involving Turkic and non-Turkic languages: for example, in central Asia Minor; in the cities of the Ottoman Empire and modern Turkey; in central Europe (where the language in question is that of Turkish migrants); the Gagauz: contacts between Iranian and Turkic languages. Different aspects of contact are examined: the phonetic, the morphological, syntax, vocabulary. Examples both from oral literature and from written texts are used.

## TUM 432 Comparative Grammar of the Turkic Languages (6 ECTS)

A comparison of the Turkish of contemporary Turkey with languages in the other sub-groups of the Turkic languages. The grammar of the most representative languages in each group (Oghuz, Oghuz-Chuvash, Kipchak, Turki, southern Siberian, Yakut), is studied.

TUM 433 Greek-Turkish Language Contacts (6 ECTS)
After an introduction to the methods of general contact linguistics, examples of linguistic interaction in the periods and regions of Greek-Turkish contact are studied (Asia Minor, Pontos and Istanbul in the 19th century, Cyprus and the Balkans up to the present, districts of Greece such as Thrace, Epiros, Crete). Besides lexical "loans", the phonetic, phonological, morphological and syntactical aspects are examined as part of the process of linguistic application and substitute. An important example is the Turkish Cypriot and Greek Cypriot dialects.

## TUM 434 Karamanlidika (6 ECTS)

An introduction to the history of the Turkish-speaking Greek populations of Asia Minor and to their literature ("Karamanlidika" as it is known) and to Turkish literature in the Greek alphabet in general (e.g. in Istanbul). The greater part of the course consists of an analysis of the script and language of texts taken from different periods and genres (religious, literary, historical).

## TUM 435 Balkan Turcology (6 ECTS)

The course deals with the two main subjects of Balkan Turckology (a branch of General Turcology): the study of the Turkish dialects of the Balkan peninsula and the influence of the Turkish language on the languages of Southeast Europe. The objectives of the course are the following: familiarity with the classification of the Rumelian (Balkan) dialects in the framework of Turkish dialectology, the study of the phenomena of linguistic contacts with the Balkan languages and the exploration of the extent of Turkish influence on the relevant languages of the Balkans (e.g. Greek, Albanian, Romanian, Bulgarian, Serbian).

## II. HISTORY - POLITICS

## TUM 440 The Byzantium and the Ottomans (6 ECTS)

In this course, the relations between the Ottoman Empire and Byzantium and from the mid-14th century to the mid15th are examined. Special emphasis is placed on the question whether and to what extent the Ottomans inherited institutions from the Byzantine Empire. The course includes the study of primary sources in Greek and Turkish. This will include texts by Greek translation, texts by Byzantine authors accompanied by a Modern Greek translation; and texts in Ottoman Turkish (either in the Arabic or in the Modern Turkish alphabet).

TUM 441 Institutions of the Ottoman Empire (6 ECTS)
In this course, the institutions of the classical period (15th16th century), the causes of their decline as well as the
institutions that developed during the 19th century are examined. The course aims for a closer examination of significant aspects of the Ottoman Empire that were first studied in the introductory course TUM 250 and the direction course TUM 350 . Selected primary sources will be read during the course.

## TUM 442 Ottoman Chronicles (6 ECTS)

In this course, some of the principal Ottoman historical chronicles of the 16th and 17 th century are examined. The course focuses on the study of the chronicles as sources for Ottoman History and their use in the historiography of the 19th century.

## TUM 444 The Tanzimat (6 ECTS)

In this course, the reforms of the Tanzimat period and the institutions, resulted from these reforms are studied. Selected primary sources will be read.

TUM 452 The Emergence and Development of Turkish Nationalism (6 ECTS)

The course starts with an introduction to theories of nationalism, and then progresses to an account of the development of Turkish nationalism. The course examines both the historic-political circumstances that favoured the development of Turkish nationalism and the ideas of its spiritual founders, for example, Ziya Gökalp and Yusuf Akçura. The coverage of the course extends to Kemal Ataturk's conception of Turkish nationalism and the latter's development in the period of single-party rule.

## TUM 453 Islam in Contemporary Turkey (6 ECTS)

The principal concern of the course is the status of Islam in the Turkish Republic. Among the subjects covered are the religious reforms during Kemal's tenure of power, Kemal's conception of the secular state, the relation between Islam and politics, the post-Kemal period and the relationship between the state, society and religion.

## TUM 456 Turkey and the European Union (6 ECTS)

The course focuses on the relations between Turkey and the European Union, which formally began in the early 1960s and are still continuing. Turkey's progress towards membership in the European Union and the effects of this progress on the internal structure of the country, including reforms, are one of the main subjects of the course. Europeans place emphasis on the perception of Europe according to Turkish public opinion and the perception of Turkey.

## TUM 457 Political Thought in Contemporary Turkey (6 ECTS)

In this course, the ideas and movements that emerged in the 19th century and affected contemporary Turkey are examined. Main topics of the course will be Kemalism, liberal thought, left-wing thought, secularism, nationalism, conservative and particular Islamic movements.

## TUM 458 Political Parties in Contemporary Turkey (6 ECTS)

In this course, the establishment and development of the political parties in contemporary Turkey are studied. The period of the one-party system (1920-1950), then the establishment of the multi-party system (1950 and after) are examined. The main political parties and their political programme, their ideological roots and the personalities who affected the political life of the country are presented.

## TUM 460 Ottoman Sources for the History of Cyprus (6 ECTS)

Archives of Ottoman sources on Cyprus. Historiographical survey and publications of Ottoman sources about Cyprus. Sources on the history of Cyprus (i.e. Ottoman, Greek and Western) in comparative perspective. Ottoman sources: Chronicles, Defters, Documents. Analysis (diplomatic and historical) and critical commentary of the Ottoman sources on Cyprus. Emerging conclusions and comparison with established historiographical theories.

## TUM 470 Islamic Reform Movements (6 ECTS)

Attempts to reform religious ideas and practices as well as political and social ways of life preceded Western influences in Islamic countries. The domination of European states in the Middle East gave additional impetus to the Islamic reform movements that emerged after the 18th century. The course examines the various movements (e.g. the Wahhabiya, the Salafiya) and compares their origins, programmes, activities and influence.

TUM 472 Contemporary Ideas and Movements in the Middle East (6 ECTS)

The ideas and movements that have influenced the Middle East from the 19th century to the present day. The first part of the course concerns the movement for the modernization of Islam. Secondly, the rise of Arab nationalism is described. The third part of the course is concerned with Islamic fundamentalism.

## TUM 473 The Kurds in the Middle East (6 ECTS)

Kurdish history is generally studied from the viewpoint of the neighbouring peoples (Arabs, Iranians, Turks). On the one hand there are historical reasons for this (the sources for Kurdish history are predominantly in the relevant three languages) and on the other hand, there are current political reasons (hardly any promotion of historical research without nation-state). It is one of the objectives of the course to move the history of the Kurds from this marginality into the centre of attention. Particular themes will be examined: the Kurds in the Middle Ages (e.g. the emergence of the term "Kurdistan" under the Seljuks), the situation of Kurdish principalities between the empires of the Ottomans and the Safavids, the consequences of Ottoman centralisation policies for the Kurds in the 19th century, the development of Kurdish nationalism and the partition of the regions inhabited by Kurds after World War I.

TUM 476 The Armenians Under Turkish Rule (6 ECTS)
The starting-point of the course is the Armenian massacres of the First World War. The next stage is the relations of the Republic of Armenia with Turkey up to the Second World War and the position of the Armenians in the Republic of Turkey. The course then goes back in time to the Armenian cultural renaissance of the 18th century, and from there progresses to the institutions of Armenian society in the Ottoman Empire and the links between those institutions and the state. Finally, the course examines the effect of the 19th-century Ottoman reforms on Armenian society, the development of the Armenian revolutionary movement and its consequences, particularly in the massacres. The course is taught as a seminar, where the students make an active contribution, normally in the form of presentations within the class.

TUM 477 History of the Balkan Peoples during the Ottoman Empire
An overview of the history of the Balkan peoples from the end of the 14th century to the beginning of the 20th century, with special emphasis on the legal and economic position of the individual as a member of a religious community, either Muslim or non-Muslim. Different peoples will be examined separately, taking into consideration the changes in the nature of Ottoman administration and in international commercial conditions. Students will read primary material and secondary sources in Turkish.

TUM 483 Contemporary Turkish Historiography (6 ECTS)
One of the corner-stones of Turkish Nationalism was the discovery of Anatolia as homeland of the Turks, a view was adopted and defended by academic and popular scientific historiography. Whereas pre-Islamic and Seljuk history were in fashion in the first decades of the Republic, Ottoman History has been the focus of attention since 1950's. The course covers the developments that took place in the 20th century and tries to show how historiography, ideology and politics interrelate.

## COURSES COMMON TO BOTH DIRECTIONS

## TUM 480 Turkish Language Reform (6 ECTS)

Efforts at reforming the Turkish and Ottoman languages started in the second half of the 19th century. At the beginning of the 20th century, several writers advocated the adoption of the Latin alphabet, while others tried to promote a reformed version of the Ottoman script. In 1928 the law concerning the introduction of the Latin alphabet was passed. In this course, the stages of language reform and language policies in the Turkish Republic and the current debate are discussed mainly on the basis of texts in the Turkish language.

## TUM 490 Ottoman Paleography (6 ECTS)

The course is open to students who have already taken the course "Introduction to Ottoman Diplomatics and Paleography." It includes the reading of manuscripts and the study of their different scripts.

## ANALYTICAL PROGRAMME OF STUDIES - LINGUISTICS AND LITERATURE

|  | ECTS |
| :---: | :---: |
| 1st YEAR |  |
| 1st Semester |  |
| TUM 100 Grammar and Syntax I (6 hours) (C) | 11 |
| TUM 106 Language Exercises I |  |
| (Reading, Writing, Dialogue) (6 hours) (C) | 8 |
| TUM 120 Introduction to Turkish Studies (IG) | 6 |
| Foreign Language Course | 5 |
| TOTAL | 30 |
| 2nd Semester |  |
| TUM 101 Grammar and Syntax II (6 hours) (C) | 11 |
| TUM 107 Language Exercises II (Reading, Writing, Dialogue) (6 hours) (C) |  |
| TUM 122 Introduction to Islam (IG) | 6 |
| Foreign Language Course | 5 |
| TOTAL | 30 |
| YEAR TOTAL | 60 |
| 2nd YEAR |  |
| 3rd Semester |  |
| TUM 200 Grammar and Syntax III (3 hours) (C) 6 |  |
| TUM 206 Language Exercises III (Reading, Writing, Dialogue) (6 hours) (C) | 7 |
| TUM 220 Introduction to Turkish Linguistics (IG) | 6 |
| TUM 251 Introduction to Ottoman History (IG) | 6 |
| Foreign Language Course | 5 |
| TOTAL | 30 |
| 4th Semester |  |
| TUM 201 Grammar and Syntax IV (C) | 5 |
| TUM 210 Translation Turkish-Greek (C) | 6 |
| TUM 230 Ottoman Language (C) | 7 |
| TUM 240 Introduction to Modern Turkish Literature (IG) | 6 |
| TUM 260 History of Turkey (IG) | 6 |
| TOTAL | 30 |
| YEAR TOTAL | 60 |

3rd YEAR
5th Semester
TUM 310 Translation Greek-Turkish (C) ..... 6
TUM 316 Dialogue (C) ..... 6
TUM 322 Cyprus during Ottoman Rule (IG) ..... 6
TUM 340 Introduction to Ottoman Literature (IG) ..... 7
Elective Course ..... 5
TOTAL ..... 30
6th Semester
TUM 301 Language of the Media (audiovisual) (C) ..... 5
TUM 302 Themes of Turkish Linguistics (CD) ..... 7
TUM 304 Main genres of Modern Turkish Literature (CD) ..... 6
TUM 342 Literature and Society in Turkey (CD) ..... 7
Elective Course ..... 5
TOTAL ..... 30
YEAR TOTAL ..... 60
4th YEAR
7th Semester
TUM 402 Morphology of the Turkish language (CD) ..... 6
TUM 404 Issues in Turkish Syntax (CD) ..... 5
TUM 410 Themes in Modern Turkish Literature (CD) ..... 7
TUM 425 History of the Turkic Languages (CD) ..... 7
Elective Course ..... 5
TOTAL ..... 30
8th Semester
TUM 417 Seminar in Turkish Literature (CD) ..... 6
TUM 420 Turkish Cypriot Literature (CD) ..... 6
TUM 431 Seminar in Turkish Linguistics (CD) ..... 6
Two Restricted Elective Courses ..... 12
TOTAL ..... 30
YEAR TOTAL ..... 60
GRAND TOTAL ..... 240
Note:
(C) = Compulsory Language Course
(IG) = Compulsory Introductory-General Course
$(C D)=$ Compulsory Direction Course

## ANALYTICAL PROGRAMME OF STUDIES - HISTORY AND POLITICS

|  | ECTS |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1st YEAR |  | 3rd YEAR |  |
| 1st Semester |  | 5th Semester |  |
| TUM 100 Grammar and Syntax I (6 hours) (C) | 11 | TUM 310 Translation Greek-Turkish (C) | 6 |
| TUM 106 Language Exercises I |  | TUM 316 Dialogue (C) | 6 |
| (Reading, Writing, Dialogue) (6 hours) (C) | 8 | TUM 322 Cyprus during Ottoman Rule (IG) | 6 |
| TUM 120 Introduction to Turkish Studies (IG) | 6 | TUM 340 Introduction to Ottoman Literature (IG) | 7 |
| Foreign Language Course | 5 | Elective Course | 5 |
| TOTAL | 30 | TOTAL | 30 |
| 2nd Semester |  | 6th Semester |  |
| TUM 101 Grammar and Syntax II (6 hours) (C) | 11 | TUM 305 Turkey in the World (CD) | 6 |
| TUM 107 Language Exercises II |  | TUM 301 Language of the Media (audiovisual) (C) | 5 |
| (Reading, Writing, Dialogue) (6 hours) (C) | 8 | TUM 350 Themes in the History of the Ottoman |  |
| TUM 122 Introduction to Islam (IG) | 6 | Empire (CD) | 7 |
| Foreign Language Course | 5 | TUM 380 History of the Islamic Middle East (CD) | 7 |
| TOTAL | 30 | Elective Course | 5 |
| YEAR TOTAL | 60 | TOTAL | 30 |
| 2nd YEAR |  | YEAR TOTAL | 60 |
| 3rd Semester |  | 4th YEAR |  |
| TUM 200 Grammar and Syntax III (3 hours) (C) | 6 | 7th Semester |  |
| TUM 206 Language Exercises III (Reading, Writing, Dialogue) (6 hours) (C) | 7 | TUM 432 Literature and Politics in Contemporary Turkey (CD) | 6 |
| TUM 220 Introduction to Turkish Linguistics (IG) | 6 | TUM 450 Themes in the History and Politics |  |
| TUM 251 Introduction to Ottoman History (IG) | 6 | of Turkey (CD) | 7 |
| Foreign Language Course | 5 | TUM 455 Greek-Turkish Relations (CD) | 5 |
| TOTAL | 30 | TUM 463 Communal Relations in Cyprus (CD) | 7 |
|  |  | Elective Course | 5 |
| 4th Semester |  | TOTAL | 30 |
| TUM 201 Grammar and Syntax IV (C) | 5 | 8th Semester |  |
| TUM 210 Translation Turkish-Greek (C) | 6 | 8th Semester |  |
| TUM 230 Ottoman Language (C) | 7 | TUM 469 The Turkish-Cypriot Community (CD) | 6 |
| TUM 240 History of Modern Turkish Literature (IG) | 6 | TUM 471 Seminar in History and Politics of Turkey (CD) | 6 |
| TUM 260 History of Turkey (IG) | 6 | TUM 478 Seminar in Ottoman History (CD) | 6 |
| TOTAL | 30 | Two Restricted Elective Courses | 12 |
| YEAR TOTAL | 60 | TOTAL | 30 |
|  |  | YEAR TOTAL | 60 |
|  |  | GRAND TOTAL | 240 |

## Note:

(C) = Compulsory Language Course
(IG) = Compulsory Introductory-General Course
$(C D)=$ Compulsory Direction Course

## RESTRICTED ELECTIVE COURSES

## A. LINGUISTICS - LITERATURE

TUM 405 Didactics of the Turkish Language
TUM 407 Turkish Dialectology
TUM 411 Old Anatolian Turkish: Its Linguistic Features and Literature
TUM 413 Literature of the Tanzimat
TUM 414 The Turkish Novel
TUM 415 Contemporary Turkish Poetry
TUM 416 Istanbul in Turkish Literature
TUM 423 The Turkish Cypriot Dialect
TUM 430 Bilingualism and Language Contacts
TUM 432 Comparative Grammar of the Turkic Languages
TUM 433 Greek-Turkish Language Contacts
TUM 434 Karamanlidika
TUM 435 Balkan Turcology

## B. HISTORY AND POLITICS

TUM 440 The Byzantium and the Ottomans
TUM 441 Institutions of the Ottoman Empire
TUM 442 Ottoman Chronicles
TUM 444 The Tanzimat
TUM 452 The Emergence and Development of Turkish Nationalism
TUM 453 Islam in Contemporary Turkey
TUM 456 Turkey and the European Union
TUM 457 Political Thought in Contemporary Turkey
TUM 458 Political Parties in Contemporary Turkey
TUM 460 Ottoman Sources for the History of Cyprus
TUM 470 Islamic Reform Movements
TUM 472 Contemporary Ideas and Movements in the Middle East TUM 473 Kurds in the Middle East
TUM 476 The Armenians under Turkish Rule
TUM 477 History of the Balkan Peoples
TUM 483 Contemporary Turkish Historiography

## C. COMMON COURSES FOR BOTH DIRECTIONS

TUM 480 Turkish Language Reform
TUM 490 Ottoman Paleography

Note: All Restricted Courses can also be taught as Seminars.

## FACULTY OF HUMANITIES


www.ucy.ac.cy/langce

## THE LANGUAGE CENTRE

The Language Centre of the University of Cyprus provides the opportunity to UCY students, from all Faculties, as well to the general public to learn a variety of languages. In particular, it offers courses in the English, French, German, Spanish, Italian, Turkish, Russian and Chinese (in collaboration with the Confucius Institute), as well as in Cypriot Sign Language. It also provides discipline-specific language courses to UCY students. Within this framework, learners acquire speaking, listening, reading and writing skills. In parallel, they develop the social and cultural knowledge that will enable them to integrate into the contemporary globalized social, academic or professional environment.

## ACTING DIRECTOR

Fryni Kakoyianni-Doa

## SPECIAL TEACHING STAFF

Elias Argyrou
Maria-Gabriella Arru
Christina Matsi-Azaïs
Stefan Schlaefli Fust
Düriye Gökçebağ
Bernadette Horton-Savvides
Shaunna Joannidou Eleni Varvaloukas-Ioannou
Françoise Jammet
Angela Kleanthous
Marianna Kyprianou Pedro Jesus Molina Muñoz Eleni Nikiforou
Yiola Papadopoulou
Helen Stavrou
Constantinos Tsouris
Christina Charalambidou -
Zeinalipour
Birgit Ziartidou

SPECIAL SCIENTISTS
Andreas Athanasiades
Rowena Burlenghi
Ewa Firsowicz
Eleni Georgiou
Diamanto Makri
Damaskini Metzidaki
Chryso Pelekani
Natalia Regginou
Ekaterina Khonina-
Stavropoulou
Chloe Theodosiou
Panayiota Themistokleous
Gaia Zaccagni
CONFUCIUS INSTRUCTOR
Yingling Duan

## INTRODUCTION

Language instruction, both in European and nonEuropean languages, is aligned with the language levels defined by the Common European Framework of Reference for Languages of the Council of Europe (CEFR). The courses are offered to UCY undergraduate students free of charge. Students can register for any language course from a beginner to an advanced level according to their departmental programme requirements, or choose it as a free elective course.

As of 2021, depending on the language taken, a LANGUAGE CERTIFICATE will be issued for students who successfully complete the required courses at a specific language level: B1.1, B1, B.2, B2+ and C1, based on the Common European Framework for Languages (CEFR). This is done in collaboration with the Academic Affairs and Student Welfare Service of the University of Cyprus. In addition, the Language Centre not only offers foreign language courses to UCY students, but also to the wider public for academic, professional or social purposes.

The Language Centre employs highly experienced and scientifically-trained teaching staff who utilize contemporary technologies and adopt student-centered teaching approaches with experiential and communicative learning methodologies.

Their mission is to help students understand how to use foreign languages effectively according to their needs and experiences, by employing a range of teaching techniques.

Finally, the Language Centre cultivates its students' linguistic self-confidence in order to develop language fluency. Therefore, our vision is to help strengthen students' language skills as a key element of success in a competitive, modern, dynamic and multicultural society.

For more information relating to our courses, you can contact us by email at Icentre@ucy.ac.cy or by phone at +357 22892901 .

## ENGLISH LANGUAGE COURSES

The main aim of this programme is to equip students with the skills required to succeed in academic, professional and social settings. Students engage collaboratively in the completion of pedagogically and linguistically driven tasks in order to develop and enhance their knowledge of English and use the language effectively in a wide variety of domains. Students, enrolled in the first level of English Language Studies (LAN 100), are expected to be approximately at the B2 level of the Common European Framework of Reference for Languages.

Except for cases where courses are a compulsory requirement by departments, all English language courses
can also be taken as free electives, provided that the prerequisites (if any) are met.

## COURSE DESCRIPTIONS

LAN 100 General Advanced English (5 ECTS)
This course introduces students to the English language skills required at university. It is designed to help students develop competency in speaking, reading, writing and listening in an academic setting and to understand the importance of sociolinguistic aspects of the language.
Whilst developing and improving all language areas, the course also promotes 21 st century skills such as critical thinking, creativity, problem solving and digital and information literacy-key skills.

Elements of this course are aligned with the B 2 level of the Common European Framework of Reference for Languages (CEFR).

LAN 101 Academic English (5 ECTS)

## Prerequisite: LAN 100 or equivalent

This course helps students to further develop their proficiency in written and spoken academic communication in English.

It is designed to help students improve the quality of their academic presentations in English in both content and delivery. All core skills incorporated in the course will assist students to perfrom effectively in their academic lives and prepare them for the workplace.

This course is aligned with the B2+ level of the Common European Framework of Reference for Languages (CEFR).

LAN 200 General Topics in Academic English (5 ECTS)

## Prerequisite: LAN 101 or equivalent

This course helps students not only to improve their knowledge of academic English, but also investigate and build specific 21 st century skills in areas such as media literacy and global awareness. Traditional and digital media alongside articles from academic journals will be exploited as source material in this course. Students will further refine their critical thinking and digital literacy skills when working together on various tasks and assignments.

Elements of this course are aligned with the B2+/C1 level of the Common European Framework of Reference for Languages (CEFR).

## English for Specific Purposes

LAN 102 English for Architecture (5 ECTS)

## Prerequisite: LAN 100 or equivalent

This course is for students of Architecture who need to develop specialized English language skills in order to function effectively in their field. Students will increase
their knowledge of architecture-related terminology in English so that they are able to express themselves with clarity, fluency and spontaneity-traits that they will use in the academic context which will serve as a catalyst for future use in their careers.

Elements of this course are aligned with the B2+1 level of the Common European Framework of Reference for Languages (CEFR).

## LAN 103 English for Biomedical Sciences (5 ECTS)

## Prerequisite: LAN 100 or equivalent

This course is for undergraduate students of the Department of Biological Sciences and the Medical School who need to develop specialized English language skills in order to perform effectively in their field. The course focuses on the development of all language skills with particular emphasis on comprehending and producing scientific texts. Students will enhance their knowledge of biology and medicine-related terminology in English.

Elements of this course are aligned with the B2+ level of the Common European Framework of Reference for Languages (CEFR).

## LAN 104 English for Technical Purposes (5 ECTS)

## Prerequisite: LAN 100 or equivalent

This course is for undergraduate students of the Departments of Civil and Environmental Engineering, Electrical and Computer Engineering, and Mechanical and Manufacturing Engineering who need to develop specialized English language skills in order to perform effectively in their field. The course focuses on the development of all language skills with an emphasis on comprehending and producing written material related to the field of Engineering. Students will increase their knowledge of engineering-related terminology in English.
Elements of this course are aligned with the B2+ level of the Common European Framework of Reference for Languages (CEFR).

## LAN 109 English for Law (5 ECTS)

## Prerequisite: LAN 100 or equivalent except for Law students

This course is for undergraduate students studying in the field of Law. It aims at helping them to use English efficiently during their academic studies and later in their lives as qualified lawyers. The course focuses on activating language skills, through collaporative task-based work. Examples of tasks include delivering oral presentations, reading and writing legal documents, and listening and speaking about legal matters.

Elements of this course are aligned with the B2+ level of the Common European Framework of Reference for Languages (CEFR).

## LAN 111 English for Computer Science (5 ECTS)

Prerequisite: LAN 100 or equivalent
This course is for students of the Department of Computer Science who need to develop specialized English language skills in order to perform effectively in their field. The course focuses on the development of all language skills with an emphasis on comprehending and producing written material related to the field of Computer Science. Students are given the opportunity to enhance their knowledge of computer science-related terminology in English.
Elements of this course are aligned with the B2+ level of the Common European Framework of Reference for Languages (CEFR).

LAN 112 English for Physics (5 ECTS)

## Prerequisite: LAN 100 or equivalent

This course is for students of the Department of Physics who need to develop specialized English language skills in order to perform effectively in their field. The course focuses on the development of all language skills with an emphasis on comprehending and producing written material related to the field of Physics. Students are given the opportunity to enhance their knowledge of physicsrelated terminology in English.

Elements of this course are aligned with the B2+ level of the Common European Framework of Reference for Languages (CEFR).

## LAN 209 Advanced English for Global Communication

 (5 ECTS)
## Prerequisite: LAN 101 or equivalent

This course is for students of Economics and other disciplines who aim at mastering their skills and competencies in English and enriching their vocabulary and terminology at an advanced level. The course encourages active participation and cooperative learning by engaging students in studying authentic material on economic, international and multicultural topics. Taskbased language learning promotes written and oral production in the target language. Upon completion of this course students are expected to communicate and interact with fluency and clarity in the target language in academic, social and professional contexts.
Elements of this course are aligned with the B2+/C1 level of the Common European Framework of Reference for Languages (CEFR).

## LAN 212 English for the Workplace (5 ECTS)

## Prerequisite: LAN 101 or equivalent

The course prepares learners for the workplace by introducing, developing and honing a set of transferable language-related skills, pivotal from the stage of searching and applying for a job, to entering and practising in the workplace. In this hands-on course, students will develop all language skills using a wide range of authentic material. Learners will receive ample practice and opportunities, to become familiar with and refine the real-life tasks and skills introduced.

Elements of this course are aligned at C1 level of the Common European Framework of Reference for Languages (CEFR).

## FRENCH LANGUAGE COURSES

French is one of the three working languages of the European Union along with English and German, and one of the two working languages of the UN, UNESCO and NATO, amongst others. The decision-making centres of the European Union and other international organizations are located in various French speaking cities, including Brussels, Strasbourg, Luxembourg, Geneva, and Lausanne. This implies work access in areas of politics, economics, diplomacy, law, business, transport and sports.

French language courses, which are structured in accordance with the proficiency levels of the Common European Framework of Reference for Languages (new descriptors, December 2018), are intended to develop effective communicative and mediation skills, as well as social and cultural skills and knowledge, through the use of a variety of approaches based on interaction and the use of technology and authentic materials.

## COURSE DESCRIPTIONS

LAN 105 French-Beginners Level I (5 ECTS)
In this course, students will acquire the basic language skills of"reception, "production","interaction" enabling them to understand and use simple French in everyday life. After completion of the course, students are expected to meet the A1.1+ level requirements of the new descriptors of the CEFR.

## LAN 106 French-Beginners Level II (5 ECTS)

## Prerequisite: LAN 105 or equivalent

At this stage, students will be able to communicate in simple routine situations and handle short social exchanges on familiar and everyday topics. They will further on the skills of "reception, "production", "interaction" and will be introduced to mediation. By the end of the course, students are expected to be competent at the A2.1 level of the new descriptors of the CEFR.

## LAN 107 French-Intermediate Level I (5 ECTS)

## Prerequisite: LAN 106 or equivalent

At this stage, students are expected to be able to communicate and mediate in situations related to routine matters and to have greater confidence in their oral and written expression. The skills are developed following a variety of activities and tasks in an effort to provide achievement in competences of of "reception, "production", "interaction", "mediation". By the end of the course, students are expected to be competent at the A2 (Waystage) level of the new descriptors of the CEFR.

## LAN 108 French-Intermediate Level II (5 ECTS)

## Prerequisite: LAN 107 or LAN 110 or equivalent

This course continues to develop communicative and mediation skills, teaching students how to express opinions and exchange views on everyday situations and current events. The competences of reception, production, interaction and mediation are further developed through a variety of activities and tasks. At the same time, it explores different aspects of contemporary France, using technology and authentic materials. By the end of the course, students are expected to be competent at the B1 level of the CEFR.

## LAN 117 French-Intermediate Level III (5 ECTS)

## Prerequisite: LAN 108 or equivalent

French Intermediate Level III (B1.2) is the second and final stage of the B1 level (B1.2). The course focuses on strengthening students' communication skills and strategies while incorporating a learner-centred assessment approach. The four skills are developed through a variety of activities and tasks which enable students to build multidimensional skills useful for social integration, while giving emphasis on plurilingual and pluricultural profiles. The course also focuses on students' cultural awareness in today's France and provides them with linguistic and cultural tools which are essential when travelling to France for personal, academic or professional reasons.

## LAN 118 French-Advanced Level I (5 ECTS)

## Prerequisite: LAN 117 or equivalent

This course is intended for students who wish to acquire knowledge of B2.1 level. Through comprehension and production activities of written and spoken language, the course provides students with the necessary tools to improve their level of knowledge of the French language and culture and to develop all communicative language skills (comprehension and production of written and spoken language, interaction and mediation) as well as language, sociolinguistic and pragmatic skills. The course aims to help students in their participation in international examinations of B2 level of the CEFR after completing the B2.2 level.

## French for Specific Purposes

LAN 110 French for Specific Purposes-History and Archaeology-Intermediate Level I (5 ECTS)

## Prerequisite: LAN 106 or equivalent

This course is designed for the students of the Departments of Classics and Philosophy, History and Archaeology, and Byzantine and Modern Greek Studies. It aims at developing comprehension of French texts in these areas of specialization. Particular attention is focused on specialized vocabulary/terminology in the above fields of study. Grammatical knowledge is expanded within the context of the texts examined. By the end of the course, students are expected to meet the requirements of the A2 level of the new descriptors of the CEFR.

## LAN 222 French for Law I (5 ECTS)

## Prerequisite: LAN 106 or equivalent

The course French for Law is intended for Law students. The aim of the course is to develop students' linguistic skills in French in order to effectively communicate at the workplace and be able to use the French language, at both spoken and written, in situations of a professional activity in the field of Law. In particular, emphasis is placed on familiarizing students with legal terminology, phraseology and the understanding of legal documents. On completion of the course, students are expected to achieve a level equivalent to A 2 in the new CEFR descriptors.

## LAN 223 French for law II (5 ECTS)

## Prerequisite: LAN 222 or equivalent

The course French for Law II is intended for Law students. The course aims at further developing the students' language skills in French (comprehension, production and interaction, both in written and spoken language), while language mediation is also introduced. At the same time, the vocabulary and phraseology of legal science in the French language are enriched. These skills will allow students to effectively use the French language in matters related to their field of study and will give them an additional qualification at personal, academic and professional level. Upon completion of the course, students are expected to achieve a level equivalent to B1.1 in the new CEFR descriptors.

## GERMAN LANGUAGE COURSES

German is the language with the largest number of speakers within the European Union, spoken in Germany, Austria and in most parts of Switzerland. Within the academic world, a good knowledge of German is especially important in disciplines such as Classics, Philosophy, Archaeology and History, as well as Medicine and Engineering.

The programme of German courses is organized in accordance with the proficiency levels of the Common European Framework of Reference for Languages (CEFR). It develops all four communicative skills (reception, interaction, production and mediation), as well as social and cultural knowledge, through the use of a variety of methodologies which are based on interaction, the use of authentic material including modern media like film, and the exploitation of computer-based resources such as the internet and Blackboard.

## COURSE DESCRIPTIONS

## LAN 070 German-Beginners Level I (5 ECTS)

This course teaches students how to function at a very basic level of listening, reading mediation of texts, writing, spoken and online interaction. It also develops their skills in understanding and using simple language, based on a limited sentence structure and familiar vocabulary related to areas of immediate relevance (personal background, cafés, countries/languages, housing, daily routine, orientation in a building etc.). The course is aligned with the A1.1+ level of the CEFR.

## LAN 071 German-Beginners Level II (5 ECTS)

## Prerequisite: LAN 070 or equivalent

This course is intended to further strengthen all communicative skills and enable students to understand and exchange information on familiar matters (restaurant, orientation in town, holidays/sights, shopping, fashion, health etc.). By the end of the course, students are expected to be competent at the A1.2/A2.1 level of the CEFR.

LAN 072 German-Intermediate Level I (5 ECTS)

## Prerequisite: LAN 071 or equivalent

The course further develops students' communication skills in situations relative to routine matters and to matters like language learning, family, traveling/mobility, spare time, media, going out, restaurants, holidays, etc. By the end of the course, students are expected to be competent at the A2 level of the CEFR.

## LAN 073 German-Intermediate Level II (5 ECTS)

## Prerequisite: LAN 072 or equivalent

This course enables students to communicate with greater confidence in their oral and written expression in describing their experiences, future plans, emotions, wishes and hopes, reasons and expressing their opinions on houses, culture, inventions, work, education, films, German history etc. Students also get familiarized with social and cultural life in German speaking countries. By the end of the course, students are expected to be competent at the B1.1. level of the CEFR.

## ITALIAN LANGUAGE COURSES

The courses in Italian, offered by the Language Centre are designed according to the Common European Framework of Reference for Languages (CEFR).

Our courses are guided mostly by communicative approach principles and are based on practical activities linked to everyday life, which require the use of the four language skills: speaking, listening, reading and writing. Particular emphasis is placed on interactive communication, focusing on language use in real situations. The general objectives of the courses are to enable students to communicate at different levels in a variety of contexts. Audio-visual and online materials are used during the courses to encourage students to practise the structures and topics learned in the classroom, and to promote self-learning and self-evaluation.

## COURSE DESCRIPTIONS

LAN 075 Italian-Beginners Level I (5 ECTS)
The course is bench-marked according to the CEFR (Common European Framework of Reference for Languages). The learning objectives of this A1.1 level course are for students to be able to produce and understand basic Italian, oral and written, for the satisfaction of personal needs and interests, for offering and soliciting information and interacting in a simple way with Italians or during a visit in Italy. The teaching/learning process is communicative and based on reading and listening comprehension activities, oral interaction, games, authentic (when possible) audio and video material.

## LAN 076 Italian-Beginners Level II (5 ECTS)

Prerequisite: LAN 075 or equivalent
Based on the A2.1 level as defined by CEFR (Common European Framework of Reference for Languages), the learning objectives of this course include students' understanding of a variety of written and oral texts and the use of simple syntactic structures to express themselves both in written and spoken Italian. A range of different situations will be given requiring both the exchange of everyday information and expressions. The teaching/learning process is communicative and based on practical activities involving the use of the four skills: speaking, listening, reading and writing.

## LAN 077 Italian-Intermediate Level I (5 ECTS)

## Prerequisite: LAN 076 or equivalent

The learning objectives of the Intermediate Level 1 course in accordance with A2 level as defined by CEFR (Common European Framework of Reference for Languages), are for students to be able to understand oral and written Italian and to speak and write it with some degree of fluency, using basic grammatical and lexical structures in a variety of communicative situations. The course will focus on the
four language skills through reading and listening comprehension activities, oral interaction, authentic audio and video material. The course is structured according mostly to the principles of the communicative approach.

## LAN 078 Italian-Intermediate Level II (5 ECTS)

## Prerequisite: LAN 077 or equivalent

The syllabus is structured according to the CEFR and to the principles of the communicative approach. By the end of the course, students are expected to be competent at the B1 level of the CEFR. They will be able to understand in general a variety of written and oral texts and to express themselves in written and spoken Italian using more complex syntactic structures. Students will need to deal with a range of different situations, requiring the exchange of everyday information and expressions of personal viewpoints on topics previously during the course. In this Intermediate level II, more aspects about Italian culture are introduced to the students.

## LAN 030 Italian-Intensive Beginners I \& II (10 ECTS)

## (It is offered only during the Summer Semester)

This Intensive course combines the LAN 075 and LAN 076 Beginners I \& II. It is based on the A1 level as defined by CEFR (Common European Framework of Reference for Languages). The learning objectives of this course include students' understanding of a variety of written and oral texts and the use of simple syntactic structures to express themselves both in written and spoken Italian. Students will need to deal with a range of different situations, requiring both the exchange of everyday information and expressions. The teaching/learning process is communicative and based on practical activities involving the use of the four skills: speaking, listening, reading and writing.

## SPANISH LANGUAGE COURSES

More than 570 million people speak Spanish today. Hispanic literature, music, cinema, art, architecture and business reflect a vibrant Latino world.

Studying Spanish as a foreign language offers a good opportunity to learn basic communicative and receptive skills (oral and written). Music, literature, movies and learning in real communicative situations are keys to becoming an autonomous learner. The programme of Spanish courses offered by the Language Centre is correlated with proficiency levels of the Common European Framework of Reference for Languages: A1-A2B1. Teachers work with students to reach these levels, with particular attention to learner needs and objectives for language acquisition.

## COURSE DESCRIPTIONS

LAN 085 Spanish-Beginners level I (5 ECTS)
This course is designed for students with little or no previous knowledge of Spanish. Basic language patterns and vocabulary are taught. Repetition and comprehensible input are important components of this course. Focus is on all five language skills: listening, speaking, reading writing and interaction. Culture is an integral part of the course and is introduced through the use of media, games, adapted readings and class discussions. Students learn to communicate in Spanish in everyday situations: greetings, asking and giving personal information, describing people, places and objects and talking about daily routines, food, recipes, ordering in a restaurant or doing shopping.

In addition to written tests and quizzes, students may also be assessed by means of aural activities. Homework assignments are an integral part of this course; they reinforce concepts/skills introduced and explored in class, which enable students to participate in class in a more meaningful way. Active participation is required. The course is designed at approximately the A1.1 level as defined by the CEFR.

## LAN 086 Spanish-Beginners level II (5 ECTS)

## Prerequisite: LAN 085 or equivalent

This course is designed for students with some knowledge of the Spanish language. It teaches basic language patterns and vocabulary. Focus is on all five language skills: listening, speaking, reading, writing and interaction. Culture is an integral part of the course and is introduced through the use of media, games, adapted readings and class discussions. In addition to written tests and quizzes, students may also be assessed by means of aural activities. Students learn to describe people, places and objects, talk about traveling experiences, analyse urban structure of a place, describe artifacts and understand sequences of audiovisuals in Spanish.
Homework assignments are an integral part of this course; they reinforce concepts/skills introduced and explored in class, which enable students to participate in class in a meaningful way. Active participation is required. The course is designed at approximately the A2.1 level as defined by the CEFR.

## LAN 087 Spanish-Intermediate level I (5 ECTS)

## Prerequisite: LAN 086 or equivalent

This third course is designed for students with a basic knowledge of the Spanish language. It teaches fundamental and more advanced language patterns and vocabulary. Repetition and comprehensible input are important components of this course. Culture is an
integral part of the course and is introduced through the use of media, games, adapted readings and class discussions. In addition to written tests and quizzes, students may also be assessed by means of aural activities. Students learn to describe people, places and objects in the present and past tenses, talk and write about past experiences, describe and compare places today and historically, analyse urban structure of historical places, describe inventions and speak and write about cultural events in Spanish.

Homework assignments are an integral part of this course. Active participation is required. The course is designed at approximately the A2 level as defined by the CEFR.

## LAN 088 Spanish-Intermediate Level II

## Prerequisite: LAN 087 or equivalent

This course is designed for students who have an intermediate knowledge of the Spanish language. More advanced language patterns and vocabulary are taught. Repetition and comprehensible input are important components of this course. In addition to written tests and quizzes, students may also be assessed by means of aural activities. Students learn to describe people, places and objects in the present and past tense, talk and write about experiences, compare and describe places and explain cultural events. They will also learn how to express wishes or orders using the subjunctive present and understand a conference about a familiar subject. The course is designed at approximately the B1.1 level as defined by the CEFR.

LAN 187 Spanish-Intensive Intermediate level I \& II (10 ECTS)

## Prerequisite: LAN 086 or equivalent

(It is offered only during the Summer Semester)
The course combines the contents of LAN 087 and LAN 088 and is ideal for prospective Erasmus students. This course teaches more advanced language patterns and vocabulary. Repetition and comprehensible input are important components of this course. Focus is on all five language skills: listening, speaking, reading writing and interaction. Culture is an integral part of the course and is introduced using media, games, adapted readings and class discussions. In addition to written tests and quizzes, students may also be assessed by means of aural activities. Homework assignments are an integral part of this course; they reinforce concepts/skills introduced and explored in class. Completion of homework assignments and participation in the writing of a course diary are a must. Active participation is required. By the end of the course, students are expected to be competent at the B1 level of the CERF.

## TURKISH LANGUAGE COURSES

Turkish, like Greek is one of the two official languages of the Republic of Cyprus. Good knowledge of the Turkish language is an advantage and is considered as an additional qualification for employment. In addition, the cooperation of companies between the two communities in the private sector and the daily communication with Turkish Cypriots is enhanced.

The Turkish language courses are designed to help students to become familiar with the Turkish language and culture. They prepare students to use the language in their professional and social life. Students will develop Turkish language skills in listening, speaking, reading and writing. The courses are designed in accordance with the Common European Framework of Reference for Languages (CEFR).

## COURSE DESCRIPTIONS

## LAN 050 Turkish-Beginners Level I (5 ECTS)

This course is intended to introduce students to the Turkish language and prepare them to use the language in their future working life or daily social activities. They will gain confidence expressing themselves by using simple sentences and exchanging ideas about the culture of the target language. This course will help students to develop Turkish language skills in listening, speaking, reading and writing at a level equivalent to the Common European Framework of Reference for Languages at the A1.1 level (CEFR). By successfully completing this course, students will have a substantial advantage for their future careers and be able to take the LAN 051 Turkish Course.

## LAN 051 Turkish-Beginners Level II (5 ECTS)

## Prerequisite: LAN 050 or equivalent

This course is a continuation to the course TurkishBeginners Level I and is designed to build upon the four basic skills such as speaking, listening, reading and writing given in level I. This course is intended to introduce students to the Turkish language and prepare them to use the language in their future working life or daily social activities. They will gain confidence expressing themselves, by using simple sentences and exchanging ideas about the culture of the target language. This course will help students to develop their Turkish language skills in listening, speaking, reading and writing. Based on the Common European Framework of Reference for Languages at the A1.2 (CEFR).

## LAN 052 Turkish-Intermediate Level I (5 ECTS)

## Prerequisite: LAN 051 or equivalent

This course is designed to build on the current level of the Turkish language and to further improve on this knowledge. The course will cover aspects of grammar and vocabulary, as well as encompassing the four skills of
speaking, listening, reading and writing. The general aim of the course is for students to acquire the ability to accurately understand oral and written Turkish and to speak and write it with some degree of fluency, using basic grammatical and lexical structures in a variety of communicative situations. The teaching methods offer role-play, group discussions, listening, written comprehension exercises and short essay writing. Based on the Common European Framework of Reference for Languages at the A2.1 (CEFR).

## LAN 053 Turkish-Intermediate Level II (5 ECTS)

## Prerequisite: LAN 052 or equivalent

This course is designed for students to improve their previous basic knowledge in the Turkish language. In this course, students have an opportunity to improve their speaking skills through discussions on topics related to routine matters, experiences and future plans. At the end of the course, students are expected to be able to communicate easily both in oral and written language, by using more complicated phrases and expressions. By the end of the semester, students are expected to be able to meet the requirements of the B1.1 level of the Common European Framework of Reference for Languages (CEFR).

## Turkish for Specific Purposes

## LAN 150 Turkish for Medical School-Beginners Level I (5 ECTS)

This course emphasizes the practical daily application of language use in medical subjects. The course focuses on the development of all language skills (reading, writing, speaking, listening) through collaborative, activity-centered learning. Specifically, students will be taught basic Turkish terminology related to their subject matter through modern, authentic Turkish texts and the course will focus on developing communication skills so that they can communicate with Turkish Cypriot patients. The course uses a variety of educational toys and tools, electronic applications, teamwork, role play, student presentations and other audiovisual materials that contribute significantly to the objectives of the course. The lesson becomes more interesting, encourages the development of student collaboration and interaction, promotes the discovery of knowledge by the students themselves, and encourages self-assessment. During the course, students acquire all language skills listening, speaking, reading and writing, giving priority to the communicative aspect of the language under the Common European Framework of Reference for Languages A1.1.

## LAN 151 Turkish for Medical School-Beginners II (5 ECTS)

## Prerequisite: LAN 150 or equivalent

The course emphasizes the practical daily application of language use in medical subjects. The course focuses on the development of all language skills (reading, writing, speaking, listening) through collaborative, activity-
centered learning. Specifically, students will be taught basic Turkish terminology related to their subject matter through modern, authentic Turkish texts and the course will focus on developing communication skills so that they can communicate with Turkish Cypriot patients. The course uses a variety of educational toys and tools, electronic applications, teamwork, role play, student presentations and other audiovisual materials that contribute significantly to the objectives of the course. The lesson becomes more interesting, encourages the development of student collaboration and interaction, promotes the discovery of knowledge by the students themselves, and encourages self-assessment. During the course, students acquire all language skills listening, speaking, reading and writing, giving priority to the communicative aspect of the language under the Common European Framework of Reference for Languages A2.1.

## LAN 152-1 Turkish for Law-Intermediate Level I (5 ECTS)

Prerequisite: LAN 051 or equivalent
This course is designed for Law students who have a basic knowledge of Turkish, Level A1 and aims to meet the needs of students who are studying in the field of Law. Specifically, students learn to understand small extracts from legal texts, read and discuss articles of the Constitution of the Republic of Cyprus ( RoC ) in Turkish, as well as texts of the European Union, the UN Charter, International Conventions, etc. Through the study of texts, grammatical and syntactic phenomena of Turkish are analysed which correspond to A2 of CEFR.

## RUSSIAN LANGUAGE COURSES

Learning Russian is a process, which helps to develop closer links, relationships and communication between Cyprus and Russia: countries with common linguistic traditions and a rich culture. The programme offered by the Language Centre is organized in accordance with the Common European Framework of Reference for Languages at a level equivalent to A2.

## COURSE DESCRIPTIONS

LAN 090 Russian-Beginners Level I (5 ECTS)
This course is an elementary Russian course, which is designed to teach basic listening, speaking, reading and writing skills. The course focuses on developing oral communicative competency. It seeks to establish oral communication skills, develop students' ability to take part in dialogues and discussions, teach students to read short texts, foster listening comprehension and develop writing skills. This course is based on the Common European Framework of Reference for Languages at the A1.1 (CEFR).

## LAN 091 Russian-Beginners Level II (5 ECTS)

## Prerequisite: LAN 090 or equivalent

The course is designed for learners with some previous knowledge of Russian. In particular, it seeks to strengthen
communication skills, both oral and written, develop students' ability to understand the main ideas of speech directed to them, foster students' expression of their own ideas and opinions, teach students to read short texts on different topics, and develop writing skills, using simple grammatical structures. This course is based on the Common European Framework of Reference for Languages at the A2.1 (CEFR).

## LAN 092 Russian-Intermediate Levell (5 ECTS)

## Prerequisite: LAN 091 or equivalent

The course is designed for students who have basic language skills in Russian. It seeks to advance students' communication skills, both oral and written, develop students' ability to attain greater competency in their written and oral expressions, and foster students' expression of their own wishes and opinions. The course teaches students to read short texts and review them, as well as further developing writing skills. In particular, it fosters students' ability to write short essays, using complex sentences. By the end of the course, students are expected to be competent at a level equivalent to A2 of the CEFR.

## CHINESE LANGUAGE COURSES

The Chinese language courses, offered jointly by the Language Centre and the Confucius Institute at UCY, are designed to conform to levels that correspond to both the Common European Framework of Reference for Languages (CEFR) and China's Hànyǔ Shuǐpíng Kǎoshì (HSK, Chinese Proficiency Test).

Our courses are guided by communicative approach principles, and are based on practical activities linked to everyday life, requiring the use of the four skills: listening, speaking, reading and writing. Particular emphasis is placed on interactive communication, focusing on language use in representative situations. The general objectives of the courses are to enable students to communicate at different levels in a variety of contexts, in order to be able to use the Chinese language effectively at their workplace and for social communication.

Audio-visual materials and e-learning facilities will be used during the courses to encourage students to practise the structures and topics learned in the classroom, and to promote self-learning and self-evaluation. In addition to the 13 -weeks of classroom sessions for each level of the course, there will be at least 6 Chinese Language Café Hours in the even weeks during the semester. Students are encouraged to participate in all the Chinese Language Café Hours, to practise and consolidate the language they have learned in class.

## COURSE DESCRIPTIONS

LAN 060 Chinese-Beginners Levell (5 ECTS)
This course is designed to give students the knowledge to produce and understand basic Chinese-oral and written-
in situations of giving and asking basic personal information and interacting in very simple ways with native Chinese speakers.

The learning outcomes upon completion of the first level course, are as follows: (1) Acquisition of the 100 most frequently used Chinese words; (2) Ability to understand and use simple Chinese words and sentences in order to carry out basic communicative activities such as greeting, ordering food, and shopping; (3) Attainment of the CEFR-Pre-level A1.1 and HSK Pre-level 1 of the Chinese language proficiency test.

## LAN 061 Chinese-Beginners Level II (5 ECTS)

## Prerequisite: LAN 060 or equivalent

The learning outcomes upon completion of the second level course, are as follows: (1) Acquisition of the 200 most frequently used Chinese words; (2) Ability to use Chinese to communicate in a simple and direct way on familiar topics such as everyday life, work, plans, personal skills, weather, food, accommodation, etc.; (3) Attainment of the CEFR-A2.1 and HSK Level 1 of the Chinese language proficiency test.

LAN 062 Chinese-Intermediate Level I (5 ECTS)

## Prerequisite: LAN 061 or equivalent

The learning outcomes upon completion of the third level course, are as follows: (1) Acquisition of 300 frequently used Chinese words; (2) Ability to use Chinese to carry out communicative tasks in a variety of areas such as daily life, work, study, and travelling; (3) Attainment of the CEFR-A2 and HSK Level 2 of the Chinese language proficiency test.

## LAN 063 Chinese-Intermediate Level II (5 ECTS)

## Prerequisite: LAN 062 or equivalent

The learning outcomes upon completion of the forth level course, are as follows: (1) Acquisition of 500 frequently used Chinese words; (2) Ability to interact fluently in Chinese with native Chinese speakers on much broader topics; (3) Attainment of the CEFR-Pre-level B1.1 and HSK Pre-level 3 of the Chinese language proficiency test.

## LAN 064 Chinese-Advance Level I (5 ECTS)

Prerequisite: LAN 063 or equivalent
The course is designed for university students who have completed the 4th level. This course is intended to introduce students to more topics in a detailed way and cover new language points such as flexible use of interrogative pronouns, complex complements of state, reduplication of monosyllabic adjectives and disyllabic verbs, the Bei-sentence and many usages of new words and phrases, etc. Writing Chinese characters is the most important components of this course because HSK 3 test
includes writing. Some elements of Chinese culture are integral part of the course with media, introduction and class discussions. At the end of the lesson, students must take a listening comprehension test. In addition, students have reading and writing assignments at home.

Upon completion of the level, students are expected to meet level B1 of the Common European Framework of Reference for languages (CEFR-level B1) and level 3 of the Chinese Language Proficiency (HSK).

## CYPRIOT SIGN LANGAUGE COURSES

The Cypriot Sign Language Courses aim at transmitting, through educational methods, the CSL, the contact with it and its dissemination as a mean of communication for the Deaf Community in Cyprus. Specifically, students will be asked to produce and understand the basic vocabulary as well as the basic forms of the CSL (CSL has its own syntactic and grammatical structure), through which they will be informed and introduced to the Culture of Deaf People in Cyprus.

## LAN 010 Cypriot Sign Language for Beginners I (5 ECTS)

It is an introductory course of undergraduate level based on the structure of linguistic signs and semantic feature that compose the Sign language. The students will be introduced to the use of fingerspelling alphabet and the exploitation and understanding of mechanisms for the formation of signs. They will have the opportunity to understand and use basic hand shapes and to explore the phonological and morphological features of the meanings as well as enrich their vocabulary in CSL. At the same time, students will gain a deep understanding of the dictionary or grammatical meanings of the signs and ways of using fingerspelling alphabet. Finally, the students will understand the critical communication-functional and socio-cultural role of the Sign language.

## LAN 011 Cypriot Sign Language for Beginners II (5 ECTS)

## Prerequisite: LAN 010

In this course, students will be able to describe their family and friendly environment, signing about daily life, activities and hobbies, as well as signing about their studies, courses, weekly schedule etc. They will also be able to understand sentences and expressions that are directly relevant to themselves (e.g. basic personal and family information, shopping, local geography, employment). In addition, they will be able to exchange information on familiar issues, but also to describe in a simple way aspect of their life, immediate environment and urgent issues (e.g. prevention, safety, medical care etc.).

## LIST OF COURSES OFFERED BY THE LANGUAGE CENTRE (5 ECTS each)

LAN 010 Sign Language-Beginners Level I
LAN 011 Sign Language-Beginners Level II
(prerequisite LAN 010 or equivalent)
LAN 030 Italian-Intensive Beginners Levels I \& II (10 ECTS) (offered only in Summer Semester)
LAN 050 Turkish-Beginners Level।
LAN 051 Turkish-Beginners Level II (prerequisite LAN 050 or equivalent)
LAN 052 Turkish-Intermediate Level I (prerequisite LAN 051 or equivalent)
LAN 053 Turkish-Intermediate Level II (prerequisite LAN 052 or equivalent)
LAN 060 Chinese-Beginners Level I
LAN 061 Chinese-Beginners Level II (prerequisite LAN 060 or equivalent)
LAN 062 Chinese-Intermediate Level I (prerequisite LAN 061 or equivalent)
LAN 063 Chinese-Intermediate Level II (prerequisite LAN 062 or equivalent)
LAN 064 Chinese-Advanced Level I (prerequisite LAN 063 or equivalent)
LAN 070 German-Beginners Level।
LAN 071 German-Beginners Level II (prerequisite LAN 070 or equivalent)
LAN 072 German-Intermediate Level I (prerequisite LAN 071 or equivalent)
LAN 073 German-Intermediate Level II (prerequisite LAN 071 or equivalent)
LAN 075 Italian-Beginners Level I
LAN 076 Italian-Beginners Level II (prerequisite LAN 075 or equivalent)
LAN 077 Italian-Intermediate Level। (prerequisite LAN 076 or equivalent)
LAN 078 Italian-Intermediate Level II (prerequisite LAN 077 or equivalent)
LAN 085 Spanish-Beginners Level I
LAN 086 Spanish-Beginners Level II (prerequisite LAN 085 or equivalent)
LAN 087 Spanish-Intermediate Level I (prerequisite LAN 086 or equivalent)
LAN 088 Spanish-Intermediate Level II (prerequisite LAN 087 or equivalent)
LAN 187 Spanish-Intensive Intermediate Levels I \& II (10 ECTS) (prerequisite LAN 086 or equivalent) (offered only in Summer Semester) )
LAN 090 Russian-Beginners Level।
LAN 091 Russian-Beginners Level II (prerequisite LAN 090 or equivalent)
LAN 092 Russian-Intermediate Level I (prerequisite LAN 091 or equivalent)
LAN 100 General Advanced English

LAN 101 Academic English (prerequisite LAN 100 or equivalent)
LAN 200 General Topics in Academic English (prerequisite LAN 101 or equivalent)
LAN 105 French-Beginners Level I
LAN 106 French-Beginners Level II (prerequisite LAN 105 or equivalent)

LAN 107 French-Intermediate Level I (prerequisite LAN 106 or equivalent)

LAN 108 French-Intermediate Level II (prerequisite LAN 107or LAN 110 or equivalent)
LAN 117 French-Intermediate Level III (prerequisite LAN 108 or equivalent)
LAN 118 French-Advanced Level। (prerequisite LAN 117 or equivalent)

## Courses for Specific Purposes

LAN 102 English for Architecture (prerequisite LAN 100 or equivalent)
LAN 103 English for Biomedical Sciences (prerequisite LAN 100 or equivalent)

LAN 104 English for Technical Purposes (prerequisite LAN 100 or equivalent)

LAN 109 English for Law (prerequisite LAN 100 or equivalent, except for Law Students)
LAN 110 French for Specific Purposes, History and Archaeology-Intermediate Level I (prerequisite LAN 106 or equivalent)
LAN 111 English for Computer Science (prerequisite LAN 100 or equivalent)
LAN 112 English for Physics (prerequisite LAN 100 or equivalent)
LAN 150 Turkish for Medical Students-Beginners I
LAN 151 Turkish for Medical Students-Beginners II (prerequisite LAN 150 or equivalent)
LAN 152-1 Turkish for Law-Intermediate Level I
LAN 209 Advanced English for Global Communication (prerequisite LAN 101 or equivalent)
LAN 212 English for the Workplace (prerequisite LAN 101 or equivalent)

LAN 222 French for Law I (prerequisite LAN 106 or equivalent)
LAN 223 French for Law II (prerequisite LAN 222 or equivalent)


## FACULTY OF LETTERS

Department of Byzantine and Modern Greek Studies Department of History and Archaeology Department of Classics and Philosophy

## FACULTY OF LETTERS


www.ucy.ac.cy/bmg/en

## DEPARTMENT OF BYZANTINE AND MODERN GREEK STUDIES

The Department of Byzantine and Modern Greek Studies covers the subjects of Byzantine Philology, Modern Greek Literature, Theory of Literature, Comparative Literature and Linguistics, and offers a single degree in Byzantine and Modern Greek Language and Literature. The Department focuses on both research and teaching. The main areas of research include the following:
(a) the study of Greek language and literature from the early post-Christian era to the present, always within the more general frame of how Greek language and literature evolved through time, starting with the Archaic period and coming up to the period under examination,
(b) the examination of Greek literary production, within a European as well as a world context,
(c) the study of Greek language and literature in Cyprus.

CHAIRPERSON
Marinos Pourgouris

## VICE-CHAIRPERSON

Marilena Karyolemou

## PROFESSORS

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Alexandra Samuel
Julia Chatzipanagioti-Sangmeister
Pantelis Voutouris

## ASSOCIATE PROFESSORS

Yoryia Agouraki
Antonia Giannouli
Marilena Karyolemou
Marianna Katsoyiannou
Stavroula Konstantinou
Rena Papadaki
Eleftherios Papaleontiou
Marinos Pourgouris
ASSISTANT PROFESSOR
Aphrodite Athanasopoulou

The programme of study is designed to provide a scholarly grounding in the areas covered by the Department. It also includes modules in Ancient Greek Philology, Latin Philology, History and Philosophy (from the programmes of study of the other two departments of the Faculty of Letters) that will equip the students with the necessary skills to teach the respective subjects in secondary schools. It is for the same reason that the programmes of study run by the other departments of the Faculty of Letters also include modules in Byzantine Philology, Modern Greek Literature and Linguistics. Apart from providing scholarly knowledge, the programme of study aims at developing the students' critical thinking, as well as broadening their intellectual horizons.

Graduates of our Department are qualified to seek employment in secondary education, research institutes and cultural foundations. Alternatively, they may choose to continue their studies and specialize at postgraduate level.

The Department also offers a minor in Byzantine and Modern Greek Language and Literature. The Minor Programme includes twelve courses (see Table V).
The Department offers on a permanent basis the course of BMG 390 Journalism and Literature to the Programme of Journalism, offered by the Department of Social and Political Sciences.

Free electives in Byzantine Philology, in Modern Greek Literature, in Theory of Literature/ Comparative Literature and in Linguistics have course codes BMG 001-020, BMG 021-050, BMG 051-074 and LAS 075-099, respectively. Apart from elective courses specifically targeted at students of other departments, these students may also alternatively select departmental courses marked as E (for elective).

## STRUCTURE AND ORGANIZATION OF THE PROGRAMME OF STUDY

The B.A. Programme in Byzantine and Modern Greek Language and Literature consists of 45 courses, corresponding to a total of 242 ECTS. For the distribution of courses per subject, see Table I. Courses in Byzantine Philology, Modern Greek Literature, Theory of Literature, and Comparative Literature have course codes which start with BMG for (B)yzantine and (M)odern (G)reek Studies, while Linguistics courses have course codes which start with LAS for (La)nguage (S)ciences. Courses are offered at three levels. The course codes for each level are presented next.
(1) Introductory Courses (BMG 100, BMG 110, BMG 120, BMG 130, BMG 141, BMG 160, BMG 170 and LAS 150). They correspond to 5 ECTS each.
(2) Courses offering an overview of a topic or of a literary period (BMG 200-399 and LAS 200-299). They correspond to 5 ECTS each.
(3) Seminars offering an in depth examination of some topic (BMG 400-499). They correspond to 9 ECTS each.
The seventh semester course BMG 435 Overview of Modern Greek Literature corresponds to 8 ECTS.

For the distribution of course codes see Table II. For the distribution of courses per semester see Tables III and IV.

## COMPULSORY COURSES

The programme of study for the B.A. in Byzantine and Modern Greek Language and Literature includes twelve (12) compulsory courses (cf. the Descriptions for Compulsory Courses). Ten of these courses are introductory: two courses in Byzantine Philology, three courses in Modern Greek Literature, one course in Literary Theory, one Linguistics course, two courses in Ancient Greek Philology, and one course in Latin Philology. The remaining two compulsory courses include an Essay Writing course and an Overview of Modern Greek Literature. Eleven of the compulsory courses are offered in the first three semesters, as follows. In the first semester: BMG 100 History of Byzantine Literature, BMG 120 Introduction to Modern Greek Literature, BMG 160 Essay Writing, LAS 150 Introduction to Theoretical Linguistics, AEF 101 Introduction to Classical Scholarship and AEF 131 Ancient Greek Prose Composition. In the second semester: BMG 110 Byzantine Greek, BMG 130 Introduction to the Theory of Literature, BMG 141 Introduction to Modern Greek Metrics and BMG 170 Landmarks in Modern Greek Literature. In the third semester: LAT 195 Latin Prose Composition. The course BMG 435 Overview of Modern Greek Literature is taught in the seventh semester.

## BYZANTINE PHILOLOGY

Apart from the two compulsory courses in Byzantine Philology (BMG 100 and BMG 110), students must attend a course in each one of the three chronological periods for Byzantine texts (see Table II), as well as a seminar in Byzantine Philology. The five thematic areas are the following: a) Byzantine writers, b) Byzantine Literature, c) Important topics of Byzantine Literature, d) Theoretical approaches in Byzantine Literature and e) Byzantine texts and Greek manuscripts (see Table II).

## MODERN GREEK LITERATURE

Apart from the three compulsory introductory courses in Modern Greek Philology (BMG 120, BMG 141 and BMG 170), as well as the Compulsory Overview Course BMG 435 , students must attend a course in each one of the
seven core areas of Modern Greek Literature (see Table II) and two seminars in Modern Greek Literature. Courses covering more than one core area of Modern Greek Literature (see General Topics in Modern Greek Literature in Table II), can satisfy the above requirement with respect to only one core area.

## THEORY OF LITERATURE - COMPARATIVE LITERATURE

Apart from the compulsory course BMG 130, students must attend one other lecture course in this area.

## LINGUISTICS

Apart from the compulsory course LAS 150 Introduction to Theoretical Linguistics, students must attend three courses from the two areas of Linguistics (see the distinction between Theoretical Linguistics and other branches of Linguistics in Table II).

## ANCIENT GREEK PHILOLOGY

Apart from the compulsory courses AEF 101 and AEF 131, students must take four 200-level Ancient Greek Philology courses from the Department of Classics and Philosophy.

## LATIN PHILOLOGY

Apart from LAT 195 Latin Prose Composition, students must take one 200-level Latin Philology course from the Department of Classics and Philosophy.

## HISTORY

Students must take four History courses from the Department of History and Archaeology, distributed as follows: one course in Ancient Greek History, one course in Byzantine History, one course in Modern or Contemporary Greek History and one 100-level or 200-level option.

## PHILOSOPHY

Students must take one 100-level Philosophy Course and one 200-level Philosophy Course (PHIL 200-299) from the Department of Classics and Philosophy.

## Seminars

From the fifth semester onwards, students must attend one seminar in Byzantine Philology and two seminars in Modern Greek Literature. Prerequisites for seminars include all the compulsory courses (except for BMG 435), as well as at least two courses in Byzantine Philology and Modern Greek Literature, respectively.

## Elective Courses

Students must take three elective courses. In line with the University Regulations for Undergraduate Studies, in the case of three elective courses these must be selected from at least two different faculties of the University. Only one first-level foreign language course can be taken as an elective. The student may take a second-level course in the same foreign language, in which case both levels are credited as electives.

In view of the fact that Archaeology and History of Art play a certain role in the understanding of medieval and modern civilization, students are advised to take as elective courses a course in Byzantine Archaeology and/or a course in Modern or Contemporary Art from those offered by the Department of History and Archaeology.

## Foreign Language

Students must select two courses in a foreign language. Both courses must be in the same foreign language.

## COURSE DESCRIPTIONS

## Compulsory Courses

## BMG 100 History of Byzantine Literature (5 ECTS)

This introductory course presents important authors, literary genres and works of Byzantine literature from the 4th to the 15th century. The main aim of the course is to offer a panorama of the Byzantine literary production and its characteristics, without requiring prior knowledge about this literature. Byzantine texts will be analyzed mainly on the basis of modern Greek translations. At the same time, selected excerpts from the original texts will be read and interpreted, enabling a first contact with the Byzantine literary language and its particularities.

## BMG 110 Byzantine Greek (5 ECTS)

The course introduces to the special features of Byzantine literature and the evolution of the Greek literary language in the Byzantine era and beyond. At the same time, the course provides the necessary practice in the interpretation of learned and vernacular Byzantine texts, in their rendering in modern Greek and in the use of reference works (dictionaries, grammars, textbooks), familiarizing students with the basic principles and tools of Byzantine Philology. The texts under consideration cover a wide range of literary genres and stylist levels from the 4th to the 15 th century inclusive.

BMG 120 Introduction to Modern Greek Philology (5 ECTS)
The course introduces a variety of issues relating to Modern Greek Philology. These include bibliography, history of literature, terminology, literary genres, the literary essay, literary criticism and so on.

BMG 130 Introduction to the Theory of Literature (5 ECTS)
The course introduces basic concepts of literary theory. It examines the literary text in relation to such fundamental notions as the author, the reader, and reality (i.e. mimesis), tracing the historical perceptions and developments associated with these concepts. It also explores specific literary theories, such as the psychoanalytic literary criticism, structuralism, post-structuralism, postcolonial theory, deconstruction, cultural studies, the Marxist literary critique, etc. The course draws its material from a variety of theoretical disciplines that include Anthropology, Psychology, Political Theory, Sociology, Linguistics and Philosophy. Its main aim is to introduce the students to different methodological approaches and interpretations of literary texts.

## BMG 141 Introduction to Modern Greek Metrics (5 ECTS)

The course examines Modern Greek traditional metres, as well as the development of free verse.

## BNE 160 Essay Writing (5 ECTS)

The aim of the course is: a) to familiarize students with academic discourse (structure of texts, argumentation) and b) to cultivate critical thinking as well as the academic use of the Greek language. In the context of the course, essays of important thinkers are closely examined and, at the same time, students have the opportunity to develop their academic essay writing skills.

## BNE 170 Landmarks in Modern Greek Literature (5 ECTS)

This course constitutes an introduction to Modern Greek Literature. A set of literary works standardly taken to be the milestones of Modern Greek literature are firstly presented within their historical contexts, and are then critically discussed.

BMG 435 Overview of Modern Greek Literature (5 ECTS)
The course aims at familiarizing final year students with the most important texts of Modern Greek Literature, from the early post-Christian era to the present. The course syllabus includes 62 texts of Modern Greek Literature, some of which are taught in class during term time. The list of texts can be obtained from the academic advisors/tutors and the Departmental Secretary.

## LAS 150 Introduction to Theoretical Linguistics (5 ECTS)

The course begins with challenging traditional assumptions about (the Greek) language. The language myths discussed in the course include misconceptions about language change, about the relationship between Ancient Greek and Modern Greek, as well as about the concept of language errors. The course goes on to present the basic principles of Modern Linguistics, such as linguistic equality, the precedence of speech over the written language and the meaning-form distinction. It introduces key distinctions of modern Linguistics, such as the synchrony-diachrony distinction, the descriptionprescription distinction and the langue-parole distinction. It examines whether there are universal characteristics of languages, as well as what it involves to have native knowledge of a language. The course focuses on the study of language as a system. It presents the four branches of Theoretical Linguistics, namely Phonology, Morphology, Syntax and Semantics, giving emphasis on data description and the construction of explanatory models in linguistic theory. Students are guided in developing problem-solving skills in each one of the core areas of Theoretical Linguistics.

## TABLE I: PROGRAMME OF STUDY FOR THE B.A. IN BYZANTINE AND MODERN GREEK LANGUAGE AND LITERATURE

|  | Number of Courses | ECTS |  | Number of Courses | ECTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Essay Writing | 1 (C) | 5 | History | 4 (4L) | 20 |
| Byzantine Philology | 6 (2C+3L+1S) | 34 | Philosophy | 2 (2L) | 10 |
| Modern Greek Literature | 13 (4C+7L+2S) | 76 | Elective Courses | 3 (3L) | 15 |
| Theory of Literature and Comparative Literature | 2 (1C+1L) | 10 | Foreign Language | 2 (2L) | 10 |
| Linguistics | 4 (1C+3L) | 20 | TOTAL | 45 | 242 |
| Ancient Greek Philology | 6 (2C+4L) | 31 |  |  |  |
| Latin Philology | $2(1 C+1 L)$ | 11 | $\begin{aligned} & C=\text { Compulsory Course } \\ & L=\text { Lecture Course } \\ & S=\text { Seminar } \end{aligned}$ |  |  |

## TABLE II: DISTRIBUTION OF COURSE CODES

## INTRODUCTORY COURSES (5 ECTS each)

BMG 100 History of Byzantine Literature
BMG 110 Byzantine Greek
BMG 120 Introduction to Modern Greek Philology
BMG 130 Introduction to the Theory of Literature
BMG 141 Introduction to Modern Greek Metrics
BMG 160 Essay Writing
BMG 170 Landmarks in Modern Greek Literature
LAS 150 Introduction to Theoretical Linguistics
SPECIAL COURSE FOR FOURTH-YEAR STUDENTS (8 ECTS)
BMG 435 Overview of Modern Greek Literature
LECTURE COURSES IN BYZANTINE PHILOLOGY (5 ECTS each)
BMG 200-214 Early Byzantine Period (300-700 A.D.)
BMG 215-229 Middle Byzantine Period (700-1200 A.D.)
BMG 300-314 Late Byzantine Period (1200-1500 A.D.)
BMG 315-329 General Topics

## LECTURE COURSES IN MODERN GREEK LITERATURE (5 ECTS each)

BMG 230-245 Medieval / Renaissance Literature, Folk Songs
BMG 246-261 From the Fall of Crete up to 1821
BMG 262-277 Heptanese Peak Literature
BMG 278-293 Prose of the 19th and the beginning of the 20th centuries

BMG 330-345 Poetry of the 19th and the beginning of the 20th centuries
BMG 346-361 Modern Prose
BMG 362-377 Modern Poetry
BMG 378-393 General Topics
LECTURE COURSES IN THEORY OF LITERATURE AND COMPARATIVE LITERATURE (5 ECTS each)

BMG 294-299
BMG 394-399

## LECTURE COURSES IN LINGUISTICS (5 ECTS each)

LAS 200-259 Theoretical Linguistics
LAS 260-299 Other branches of Linguistics
PHILOLOGY SEMINARS (9 ECTS each)
BMG 400-434 Byzantine Philology
BMG 436-499 Modern Greek Literature, Theory of Literature, Comparative Literature

## ELECTIVE COURSES (5 ECTS each)

BMG 001-020 Byzantine Philology
BMG 021-050 Modern Greek Literature
BMG 051-074 Theory of Literature and Comparative Literature
LAS 075-099 Linguistics

## TABLE III: PROGRAMME OF STUDY FOR THE FIRST FOUR SEMESTERS

| ECTS |  |  |  | ECTS |
| :---: | :---: | :---: | :---: | :---: |
| 1st Semester |  | 3rd Semester |  |  |
| BMG 100 | History of Byzantine Literature 5 | BMG 2../3.. | Course in Byzantine Philology | 5 |
| BMG 120 | Introduction to Modern Greek Literature 5 | BMG 2../3.. | Course in Modern Greek Literature | 5 |
| LAS 150 | Introduction to Theoretical Linguistics 5 | LAT 195 | Latin Theme | 6 |
| LAS 160 | Essay Writing 5 | HIS | Course in Ancient Greek or |  |
| AEF 101 | Introduction to Classical Philology 5 |  | Byzantine History | 5 |
| AEF 131 | Ancient Greek Prose Composition 6 | HIS | Course in Modern or Contemporary Greek History | 5 |
| TOTAL 31 |  | LAN | Foreign Language Course | 5 |
| 2nd Semester |  | TOTAL |  | 31 |
| BMG 110 | Byzantine Greek 5 | 4th Semester |  |  |
| BMG 130 | Introduction to the Theory of Literature 5 |  |  |  |  |
| BMG 141 | Introduction to Modern Greek Metrics 5 | BMG 2../3.. | Course in Byzantine Philology | 5 |
| BMG 170 | Landmarks in Modern Greek Literature 5 | BMG 2../3.. | Course in Modern Greek Literature | 5 |
| AEF 200-256 | Course in Ancient Greek Philology 5 | AEF 200-256 | Course in Ancient Greek Philology | 5 |
| HIS | Course in Ancient Greek or | LAT 267-299 | Course in Latin Philology | 5 |
|  | Byzantine History | PHIL 1 | Introductory Philosophy Course | 5 |
| TOTAL | 30 | LAN | Foreign Language Course | 5 |
|  |  | TOTAL |  | 30 |
|  |  | GRAND TOTAL |  | 122 |

## TABLE IV: SET OF COURSES FOR THE 3rd AND 4th YEAR OF THE B.A. PROGRAMME IN BYZANTINE AND MODERN GREEK LANGUAGE AND LITERATURE

BMG 200-229 and BMG 300-329: 1 Course in Byzantine Philology
BMG 230-293 and BMG 330-393: 5 Courses in Modern Greek Literature
BMG 294-299 and BMG 394-399: 1 Course in the Theory of Literature/Comparative Literature
BMG 400-434: 1 Seminar in Byzantine Philology
BMG 436-499: 2 Seminars in Modern Greek Literature
BMG $435 \quad$ Overview of Modern Greek Literature (in the 7th semester)
LAS 200-299: 3 Linguistics Courses
AEF 200-299: 2 Courses in Ancient Greek Philology
HIS 1..-2..: 1 History Course
PHIL 200-294: 1 Philosophy Course
3 Elective Courses

[^1]
## TABLE V: MINOR PROGRAMME OF STUDY IN BYZANTINE AND MODERN GREEK LANGUAGE AND LITERATURE

BMG 100 Introduction to Byzantine Literature<br>BMG 120 Introduction to Modern Greek Literature<br>BMG 130 Introduction to the Theory of Literature<br>BMG 170 Landmarks in Modern Greek Literature<br>LAS 150 Introduction to Theoretical Linguistics

2 Courses of Byzantine Philology
(without the restriction of one course per core area of Byzantine Literature)
3 Courses of Modern Greek Literature
(without the restriction of one course per core area of Modern Greek Literature)

## 1 Linguistics Course

1 option from the remaining Compulsory Courses or Lecture Courses offered by the Department
(i.e. a course in Byzantine Philology, Modern Greek Literature, Theory of Literature, Comparative Literature or Linguistics)


## FACULTY OF LETTERS


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## DEPARTMENT OF CLASSICS AND PHILOSOPHY

The Department of Classics and Philosophy, as is indicated by its name, cultivates two distinct academic fields, Classics and Philosophy. Consequently, it offers two different undergraduate programmes of study, which lead to two different B.A. degrees.
Classics is the study of ancient Greeks and Romans. Their civilizations represent two of the world's most ambitious and pioneering ages - they produced outstanding work in poetry, theatre, historiography, oratory and the arts, and developed innovative ways of thinking and original approaches to politics. Philosophy, for example, and democracy are two of the most significant contributions of the Ancient Greeks. The sustained significance of these civilizations for subsequent cultures has earned them the label "classic" and has made them a point of reference for intellectuals, writers, poets, artists and political theorists of all ages. In other words, Classics is as much about the present as it is about the past!
Philosophy investigates fundamental questions about morality and politics, language, mind, logic, knowledge, art, existence and reality, God etc. There are many examples of philosophical questions in relation to morality, politics such as: What is morally right and what is morally wrong? How should we live? What do we owe to others? How should a just society be organized? What is the legitimacy of political power? Is political disobedience permissible? What is art? What qualifies as art? What is the nature of beauty?

## CHAIRPERSON

Georgios Xenis

## VICE-CHAIRPERSON

Maria Ypsilanti

## PROFESSORS

Anna Panayotou-Triantaphyllopoulou
Dimitris Portides
Georgios Xenis

## ASSOCIATE PROFESSORS

Demokritos Kaltsas
Antonios Tsakmakis
Spyridon Tzounakas
Maria Ypsilanti

## ASSISTANT PROFESSORS

Christos Kyriacou
Vassilis Livanios
Margot Neger

## LECTURER

Ioannis Christodoulou

The duration of studies is eight semesters. The Department has also developed links with numerous universities and research centres abroad, offering the opportunity of international mobility to the students and thus enhancing their learning experience.
The majority of the Department's graduates work as secondary school teachers, but there are also many career opportunities in fields such as cultural administration, the media, various government agencies, the EU institutions etc. Graduates can continue their studies in postgraduate programmes in Cyprus or abroad and specialize in fields that interest them.

## UNDERGRATUATES PROGRAMMES OF STUDY

The Department of Classics and Philosophy offers, as already mentioned above, two distinct undergraduate programmes of study and therefore two separate B.A. degrees:
a) a programme in Classics and
b) a programme in Philosophy.

The two major and the two minor programmes of study will be presented below: an analysis of their structure and a description of their content.

## MINOR PROGRAMMES OF STUDY

Apart from the two major programmes of study, the Department also offers two minor programmes:
a) a minor programme in Classics and
b) a minor programme in Philosophy.

The minor programmes are intended for students of other departments who are interested in developing their knowledge in Classics or Philosophy.

## UNDERGRATUATE PROGRAMME IN CLASSICS

The Programme mainly examines the two classical cultures of Greece and Rome through their written texts. The emphasis is on the ancient Greek and Latin languages and literatures, but the programme also includes courses on Byzantine and Modern Greek languages and literatures in order to provide a comprehensive picture of Greek letters. Moreover, the course enhances further students' knowledge on the above subjects by offering courses on ancient history and historical linguistics thus developing students' interdisciplinary learning. The career opportunities offered by the programme are mentioned in the previous section.

## STRUCTURE OF THE PROGRAMME IN CLASSICS

The programme in Classics consists of 44 courses (242 ECTS). (One ECTS corresponds to 25-30 hours of study by the student). More specifically:

- Thirteen Courses in Ancient Greek Literature
- Eight Courses in Latin Literature
- One Course in Byzantine Literature (BMG 100) offered by the Department of Byzantine and Modern Greek Studies (BMG)
- Six Courses in Modern Greek Literature (from the courses offered by BMG)
- Four Courses in Linguistics (including LAS 150)
- Four Courses in History (from the courses offered by the Department of History and Archaeology)
- Two Courses in Philosophy
- Three Elective Courses
- Three Courses in a Foreign Language (from the courses offered by the Language Centre)


## PROGRAMME IN PHILOSOPHY

The programme in Philosophy aims at providing the philosophic education required for the students to become acquainted with the wide variety of basic philosophical notions and principles, as well as to prepare them for advanced study in Philosophy. Therefore, special emphasis is placed on the study of the history of philosophy (especially Greek philosophy), but there is also an emphasis on particular areas of modern and contemporary philosophy (ethics and political philosophy, philosophy of science, philosophy of mind) in order to promote critical thinking and further broaden the students' scholarly perspectives.
Furthermore, the programme includes a selection of philological courses from all departments of the Faculty of Letters, which ensures that graduates develop a broad academic background in order to work efficiently in secondary education.

## STRUCTURE OF THE PROGRAMME IN PHILOSOPHY

The programme in Philosophy consists of 45 courses (240 ECTS). More specifically:

- Eighteen Courses in Philosophy
- Six Courses in Ancient Greek Literature
- Three Courses in Latin Literature
- Three Courses in History (from the courses offered by the Department of History and Archaeology)
- Six Courses in Modern Greek Literature and/or Linguistics (from the courses offered by BMG)
- Three Courses in a Foreign Language (from the courses offered by the Language Centre)
-Three Elective Courses
- One Course in Psychology (from the courses offered by the Department of Psychology)
- Two Courses in Sociology or Political Science (from the courses offered by the Department of Social and Political Sciences)


## COMPULSORY COURSE DESCRIPTIONS

## Programme in Classics

AEF 101 Introduction to Classical Philology (5 ECTS) Introduction to the object of study, methodology and history of Classical Philology. Special attention is given to the following areas:

- History of ancient literature. Periods, genres, representatives. Survivals and influence.
- History of the transmission and criticism of ancient texts.
- Principles and methods of literary criticism from Antiquity to the modern era.
- Research tools: dictionaries, handbooks on grammar and syntax, bibliographical resources, electronic sources, etc.


## AEF 103 Methodology of Classical Philology (5 ECTS)

Introduction to philological study and methodology with emphasis on practical exercise. Special emphasis on issues such as:

- Textual criticism and critical edition.
- Papyrology and Paleography.
- Analysis and interpretation of the texts.
- Kinds of scholarly publications.
- Clues on how to do research and write scholarly essays.


## AEF 131 Ancient Greek Language Course (6 ECTS)

Reading of selected passages from the work of Attic prose writers. The course focuses on topics such as:

- Language and style of the texts.
- Textual criticism.
- Translation technique.

A tutorial is offered as an integral part of the course.
AEF 132 Texts of Ancient Philosophy (5 ECTS)
In this course, texts of classical Greek philosophy, mainly Plato (secondarily Aristotle), are read and subjected to philological analysis and interpretation. Our main goal is for students to familiarize themselves with the philosopher's language and style by studying in detail his choices in grammar, syntax and vocabulary. More focus is placed on techniques of translation into Modern Greek. A parallel goal is to introduce the students to the philosophical, historical and literary problems concerning Plato.
The text studied can be either one of the shorter dialogues in its entirety or selections from the whole oeuvre.

AEF 202 Introduction to Ancient Greek Rhetoric (5 ECTS)
Introductory overview of the theory and practice of ancient Greek rhetoric, with emphasis on Attic oratory. Characteristic samples, demonstrative of the main structural and stylistic features of rhetorical speech, are examined.

- Principles and evolution of rhetoric in Antiquity.
- Rhetorical treatises, elements of ancient rhetoric theory.
- Attic oratory: principal representatives and their work.
- Analysis of selected speeches and passages with emphasis on matters of rhetorical style and technique.


## AEF 210 Homer (5 ECTS)

Introduction to Homer and to the problems of Homeric scholarship as well as familiarization with the reading and the study of the Homeric text. Characteristic samples from the Homeric epics are analysed, and the following topics are discussed:

- Definition, description and evaluation of the Archaic period of ancient Greek literature.
- Historical, socio-political and literary conditions of the Archaic period. Epic - heroic epic.
- The poet.
- History of the transmission of the Homeric text.
- The language of the Homeric epic - elements of metrics.
-The Homeric Problem.


## AEF 214 Lyric Poetry (5 ECTS)

Introductory overview of Archaic lyric poetry. Issues discussed include: lyric genres, ancient and modern classifications; main representatives; poetry and society in Archaic Greece; festivals, games, symposium; epic tradition, popular and personal poetry; music and dance; history of the text of lyric poets; language of the poems. The basic metres of the poems are examined, and characteristic texts are commented upon in detail (elegy, iamb, melic poetry, older choral lyric). There is also an indicative discussion and criticism of various modern translation approaches.

## AEF 217 Introduction to Ancient Drama (5 ECTS)

Introductory topics on the study of Ancient Greek drama. More specifically, the course focuses on:

- The birth of ancient Greek drama as evidenced by literary, historical and archaeological sources.
- Dramatic festivals.
- The theatre and the performance.
- Dramatic genres and their evolution.
- Major representatives and their work.


## AEF 243 Ancient Greek Historiography (5 ECTS)

Introductory overview of classical historiography with emphasis on the work of its three chief representatives.

Other issues, like the birth of Greek historical thought, the origins of historiography, the first representatives and the main features of their work are discussed. Selected passages from the work of Herodotus, Thucydides and Xenophon are analysed (linguistic study, literary and historical commentary, observations on narrative techniques and historical thought) and the relation among the three writers, as well as the evolution of the genre, are also discussed.

## AGL 263 Historical Linguistics I (5 ECTS)

Overview of undeciphered scripts of the East Mediterranean with regard to pre-Hellenic linguistic material. Examination of the dialects of the Greekspeaking world during the second and first millennium B.C. and the corresponding syllabic scripts or alphabets.

## AGL 369 Historical Linguistics II (5 ECTS)

Examination of the historical and political conditions that allowed the formation and expansion of Koine in the Greek-speaking world during the Hellenistic and Roman periods. Description (phonetics, phonology, morphology, semantics, syntax) of this form. Atticism. Written and oral code during the Byzantine era. The formation of modern Greek dialects.

## AGL 445-470 Linguistics Seminar (10 ECTS)

(e.g. AGL 465 Morphology of Ancient Greek Language)

Forms and structure of different categories of words in Ancient Greek (articles, pronouns, nouns, adjectives, verbs, etc.). Inflection, word-formation, paradigms, derivation and compounds, stress changes, etc.

## LAT 195 Latin Language Course (6 ECTS)

Linguistic, syntactic and stylistic exercises on Latin prose, based on selected passages of Latin literature. Parallel examination of certain poetic texts.

## LAT 272 Latin Oratory (Cicero) (5 ECTS)

Brief introduction to classical oratory, oratory as a literary genre, kinds and structure of rhetorical speech. Oratory in Rome, its evolution and principal representatives. The political and literary quality of Cicero and his historical and political milieu. Selected passages from one or more speeches of Cicero are analysed with special emphasis on rhetorical and stylistic issues of the text, the structure and effectiveness of argumentation, the writer's political thought and the reconstruction of various aspects of contemporary political and social life.

## LAT 274 Latin Prose (5 ECTS)

Analysis of a text, preferably from Roman Historiography or Biography. Main features of Roman Historiography and Biography, the interrelation of these two literary genres, their origins and evolution. Introduction to the writer under discussion and his era. Philological and historical
interpretation of a selected work, where issues of style, narrative techniques, objectivity and impartiality, political interests and historical thought are principally investigated.

## LAT 276 Vergil, Aeneid (5 ECTS)

The course offers a systematic introduction to Roman epic and, more specifically, to the Aeneid. The structure and content of the lectures aim at:
a) Familiarizing students with the classical Latin language.
b) Offering a detailed introduction to certain critical, historical and cultural elements that underline the composition of Latin epic. Issues discussed include:

- The correlation of myth, history, and politics in Latin epic.
- The association of a poetical and metapoetical approach to the text with narratology, structure and content, and with the political and cultural contexts of the era.
- Vergil's literary models.


## COMPULSORY COURSE DESCRIPTIONS

## Programme in Philosophy

## PHIL101 Introduction to Philosophy (5 ECTS)

- Proposed definitions of philosophy, its main goals and data-sources.
- Fundamental philosophical concepts (reality, truth, knowledge, explanation, justification, etc.).
- Fundamental philosophical questions and the branches of philosophy in which they belong (Metaphysics, Epistemology, Ethics, Aesthetics, Political Philosophy).
- Forms of logical reasoning (deductive, inductive, abductive, etc.) and fallacies.
- Core philosophical distinctions (necessary/contingent, a priori-a posteriori, analytic/synthetic, etc.).
- Basic philosophical methods (conceptual analysis, dialectic, naturalistic method, etc.).

PHIL102 Introduction to Ancient and Modern Philosophy (5 ECTS)

Beginnings of Philosophy: issues of cosmology and ontology in the presocratic philosophy.

Plato: The theory of Forms, the problem of definition and knowledge, political and ethical philosophy.

Aristotle: Analysis of the Being and his 'hylomorphism', the problem of knowledge and First Principles of science, moral philosophy.

The transition from the philosophy of the Middle Ages to the Modern Philosophy. The problem of universals.

The rationalists: Descartes, Spinoza and Leibnitz. The problem of knowledge and its foundations.

The empiricists: Locke, Berkeley and Hume. Experience as the principle of knowledge. The problem of induction.
The Kantian composition: The critical philosophy of Kant. The synthetic a priori knowledge.

## PHIL103 Introduction to Epistemology and Metaphysics

 (5 ECTS)The basic topics covered in the course are the following:
a) Basic epistemic concepts (truth, justification, evidence, knowledge, truth) and the problems they give rise to.
b) Basic metaphysical concepts (God, causation, modality, mind, time etc.) and the problems they give rise to.

## PHIL104 Introduction to Logic (5 ECTS)

Introduction to propositional Logic and the basic concepts (e.g. logical properties of sentences, consistency of sets of sentences, validity of arguments) of truthfunctional logic. Truth-functional logic will be developed, and the structure of sentences and arguments will be analysed. Formalization of natural language in the language of propositional calculus will be explained and practised, and we will learn the use of truth-trees for evaluating truth-functional validity, consistency, etc.

## PHIL105 Introduction to Ethics (5 ECTS)

The basic topics covered in the course are the following:
a) Introduction to the moral realism \antirealism distinction.
b) Introduction to the prima facie intuitiveness of moral realism (phenomenology of moral discourse and practice, moral truth, moral progress, moral disagreement) and of the possibility of antirealist undercut.
c) Introduction to basic realist moral theories and their virtues and problems (e.g. divine command theory and the Euthyphro problem).
d) Introduction to Kantian constructivism and its virtues and problems.
e) Introduction to the moral antirealism of cultural relativism and its virtues and problems. Brief historical reference to the moral antirealism of Marx, Nietzsche and Freud invocation of moral theories in response to applied moral problems.

## DEPARTMENT OF CLASSICS AND PHILOSOPHY

## DETAILED PROGRAMME OF STUDIES IN CLASSICS

| ECTS |  |  |  |  | ECTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 st Semester |  |  | 5th Semester |  |  |
| AEF 101 | Introduction to Classical Scholarship | 5 | AEF XXX | Ancient Greek Literature Course | 5 |
| AEF 131 | Ancient Greek Language Course | 6 | LAN III | Foreign Language from Language Centre | 5 |
| LAT 195 | Latin Language Course | 6 | LAT XXX | Latin Literature Course | 5 |
| BMG 120 | Introduction to Modern Greek Literature | 5 | AGL 4... | Seminar | 10 |
| BMG 100 | Introduction to Byzantine Literature | 5 | BMG XXX | Modern Greek Literature | 5 |
| LAS 150 | Introduction to Theoretical Linguistics | 5 | HIS | Roman History | 5 |
| TOTAL |  | 32 | TOTAL |  | 35 |
| 2nd Semester |  |  | 6th Semester |  |  |
| AEF 132 | Texts of Ancient Philosophy | 5 | AEF/LAT | Seminar | 10 |
| AEF 202 | Introduction to Ancient Greek Rhetoric | 5 | AEF XXX | Ancient Greek Literature Course | 5 |
| AEF 217 | Introduction to Ancient Drama | 5 | BMG XXX | Modern Greek Literarure | 5 |
| LAT 274 | Latin Prose | 5 | LAT XXX | Latin Literature Course | 5 |
| HIS 144 | Introduction to Ancient History | 5 | HIS | History Course of optional subject | 5 |
| LAN I | Foreign Language, from Language Centre | 5 | TOTAL |  | 30 |
| TOTAL |  | 30 | 7th Semester |  |  |
| 3rd Semester |  |  | BMG XXX Modern Greek Literature |  | 5 |
| AEF 103 | Methodology of Classical Philology | 5 | LAT/AEF | Seminar | 10 |
| AEF 210 | Homer | 5 | PHIL XXX | Philosophy Course | 5 |
| AEF 243 | Ancient Greek Historiography | 5 | Free Electiv | e Course | 5 |
| LAT 272 | Latin Oratory (Cicero) | 5 | TOTAL |  | 25 |
| AGL 263 | Historical Linguistics I | 5 | 8th Seme |  |  |
| LAN II | Foreign Language, from Language Centre | 5 | 8th Sem |  |  |
| TOTAL |  | 30 | AEF/LAT | Seminar | 10 |
|  |  |  | LAT XXX | Latin Literature Course | 5 |
| 4th Seme |  |  | Free Electi | e Course | 5 |
| AEF 214 | Lyric Poetry | 5 | Free Electi | e Course | 5 |
| LAT 276 | Vergil, Aeneid | 5 | BMG XXX | Modern Greek Literature | 5 |
| PHIL XXX | Philosophy Course | 5 | TOTAL |  | 30 |
| AGL 369 | Historical Linguistics II | 5 | GRAND T | OTAL | 242 |
| HIS/ARC | Ancient History or Classical Archaeology Course | 5 |  |  |  |
| BMG XXX | Modern Greek Literature | 5 |  |  |  |
| TOTAL |  | 30 |  |  |  |

## Notes:

1. The distribution of courses for the 5th to 8th semester is indicative, on condition that students take one seminar per semester.
2. When the course number is not specified, students may choose from among the courses offered in the Department of Classics and Philosophy. Courses in Modern Greek Literature should not be chosen from among those with code BMG 0.. .
3. Students must attend two 300-level courses in Ancient Greek and two300-level courses in Latin.
4. No student may attend a seminar course without having already successfully completed a 300-level course in the same subject.
5. The three seminars in the Ancient Languages can be distributed either as two in Ancient Greek Literature with one in Latin Literature or as one in Ancient Greek Literature with two in Latin Literature.
6. Free elective courses may not be chosen from the Department of Classics and Philosophy.

## Codes:

AEF = Ancient Greek Literature
LAT = Latin Literature
LAN $=$ Foreign Language
AGL = Historical Linguistics
PHIL = Philosophy
HIS = History
ARC = Archaeology
BMG = Byzantine and Modern Greek Studies (except BMG 100 Introduction to Byzantine Literature)
LAS $=$ Language Sciences

## PROGRAMME IN CLASSICS (Minor)

## A. INTRODUCTORY COURSES

Three from the following courses:

1. AEF 101 Introduction to Classical Scholarship
2. AEF 131 Ancient Greek Language Course
3. LAT 195 Latin Language Course
4. AGL 263 Historical Linguistics I

TOTAL: 16 or 17 ECTS

## Note:

AEF 101 and AEF 131 are prerequisites for Ancient Greek Literature Courses.
AGL 263 can be replaced by LAT 195, which is a prerequisite for one of the courses LAT 270-299.

## B. CORE COURSES

1. Six courses in Ancient Greek Literature from different subject areas.
2. Two courses in Latin Literature (LAT 270-299) from different subject areas.

TOTAL: 40 ECTS

## C. GENERAL COURSES

One course from the following:

1. Introduction to Ancient History (from the Department of History and Archaeology)
2. Ancient Greek Literature (different from those selected under Category B)
3. Latin Literature (different from those selected under Category B)

TOTAL: 5 ECTS
GRAND TOTAL: 61/62 ECTS

DETAILED PROGRAMME OF STUDIES IN PHILOSOPHY

| ECTS |  |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1st Semester |  | 5th Semester |  |
| PHIL 101 Introduction to Philosophy | 5 | One 300 Level PHIL Course | 5 |
| PHIL 103 Introduction to Epistemology and Metaphysics | 5 | One 300 Level PHIL Course | 5 |
| PHIL 104 Introduction to Logic | 5 | One 200 Level AEF Course | 5 |
| AEF101 Introduction to Classical Scholarship | 5 | One 200 Level AEF Course | 5 |
| AEF 131 Ancient Greek Language Course | 6 | One 100 Level IST Course | 5 |
| BMG 120 Introduction to Modern Greek Literature | 5 | One BMG or LAS Course | 5 |
| TOTAL | 31 | TOTAL | 30 |
| 2nd Semester |  | 6th Semester |  |
| PHIL 102 Introduction to Ancient and Modern Philosophy | 5 | One 300 Level PHIL Course | 5 |
| PHIL 105 Introduction to Ethics | 5 | One 300 Level PHIL Course | 5 |
| LAT 195 Latin Language Course | 5 | One 200 Level AEF Course | 5 |
| AEF 132 Texts of Ancient Philosophy | 6 | One BMG or LAS Course | 5 |
| BMG 130 Introduction to the Theory of Literature | 5 | One of the following courses: <br> SPS 154, SPS 281, SPS 211, SPS 102 | 6 |
| LAN I (first level of foreign language) | 5 | SPS 154,SPS 281,SPS 211,SPS 102 | 6 |
| TOTAL | 31 | One of the following courses: <br> PSY 402, PSY 321 | 6 |
| 3rd Semester |  | TOTAL | 32 |
| One 200 Level PHIL Course | 5 | 7th Semester |  |
| One 200 Level PHIL Course | 5 | One 300 Level PHIL Course | 5 |
| One 100 Level HIS Course | 5 | One 400 Level PHIL Course | 10 |
| LAS 150 Introduction to Theoretical Linguistics | 5 | LAT 279 Roman Philosophical Texts | 5 |
| One 200 Level LAT Course | 5 | Free Elective Course | 5 |
| LAN II (second level of foreign language) | 5 | One 100 Level HIS Course | 5 |
| TOTAL | 30 | TOTAL | 30 |
| 4th Semester |  | 8th Semester |  |
| One 200 Level PHIL Course | 5 | One 300 Level PHIL Course | 5 |
| One 200 Level PHIL Course | 5 | One 400 Level PHIL Course | 10 |
| One 200 Level PHIL Course | 5 | Free Elective Course | 5 |
| One of the following courses: |  | Free Elective Course | 5 |
| SPS 154, SPS 281, SPS 211, SPS 102 | 6 | TOTAL | 25 |
| One BMG or LAS Course | 5 | GRAND TOTAL | 240 |
| TOTAL | 31 |  |  |

## Notes:

1. All the seminars have as prerequisites all five compulsory courses.
2. Courses from Department of BMG: BMG100, BMG 230-245, BMG 246-261, BMG 262-277, BMG 278-293, BMG 294-299, BMG 200-214, BMG 215-229, LAS 200-259.

## CONTENT OF PROGRAMME IN PHILOSOPHY

## A. PHILOSOPHY COURSES

- Five Compulsory Courses (25 ECTS)

PHIL101 Introduction to Philosophy
PHIL102 Introduction to Ancient and Modern Philosophy PHIL103 Introduction to Epistemology and Metaphysics
PHIL104 Introduction to Logic
PHIL105 Introduction to Ethics

- Five 200 Level Courses from the following list ( 25 ECTS)

PHIL 201 Elements of Platonic Philosophy
PHIL 202 Elements of Aristotelian Philosophy
PHIL 203 Elements of Presocratic Philosophy
PHIL 204 Elements of Hellenistic Philosophy
PHIL 205 Ancient Political Philosophy
PHIL 211 Rationalism
PHIL 212 British Empiricism
PHIL 213 Rationalism vs. Empiricism
PHIL 214 Elements of Kant's Philosophy
PHIL 215 German Idealism
PHIL 221 Frege, Russell, Wittgenstein
PHIL 222 Philosophy of Science: Scientific method
PHIL 223 Philosophy of Science: Logical Positivism and Critique
PHIL 224 Contemporary Metaphysics
PHIL 225 Problems of Philosophy
PHIL 226 Contemporary Philosophy
(Note: The list is regularly updated)

- Six 300 Level courses from the following list (30 ECTS)

PHIL 301 Topics in Metaphysics
PHIL 302 Topics in Epistemology
PHIL 303 Topics in Ethics
PHIL 304 Topics in Philosophy of Mind
PHIL 305 Topics in Philosophy of Science
PHIL 306 Topics in Philosophy of Perception
PHIL 307 Topics in Social and Political Philosophy
PHIL 308 Topics in History of Philosophy I
PHIL 309 Topics in Analytic Philosophy
PHIL 310 Topics in Philosophy of Social Sciences
PHIL 311 Topics in Aesthetics
PHIL 312 Topics in Philosophy of Language
PHIL 313 Topics in Philosophy of Religion
PHIL 314 Topics in Ontology
PHIL 315 Topics in Philosophy of Space and Time

## PHIL 316 Topics in Logic

PHIL 317 Topics in History of Philosophy II
PHIL 318 Topics in History of Philosophy III
(Note: The list is regularly updated)

- Two Seminars from the following list (20 ECTS)

PHIL 401 Seminar in Metaphysics
PHIL 402 Seminar in Epistemology
PHIL 403 Seminar in Ethics
PHIL 404 Seminar in Philosophy of Mind
PHIL 405 Seminar in Philosophy of Science

PHIL 406 Seminar in Philosophy of Perception
PHIL 407 Seminar in Social and Political Philosophy
PHIL 408 Seminar in History of Philosophy
PHIL 409 Seminar in Analytic Philosophy
PHIL 410 Seminar in Philosophy of Social Sciences
PHIL 411 Seminar in Aesthetics
PHIL 412 Seminar in Philosophy of Language
PHIL 413 Seminar in Philosophy of Religion
(Notes: a) The list is regularly updated, b) Prerequisites: PHIL 101,
$102,103,104,105$ )

## B. SIX COURSES IN ANCIENT GREEK PHILOLOGY (31 ECTS)

AEF 101 Introduction to Classical Scholarship
AEF 131 Ancient Greek Language Course
AEF 132 Texts of Ancient philosophy
Three 200 Level AEF Courses

## C. THREE COURSES IN LATIN PHILOLOGY (16 ECTS)

LAT 195 Latin Language Course
LAT 279 Roman Philosophical texts
One 200 level LAT course
D. SIX COURSES IN MODERN GREEK OR
LINGUISTICS ( 30 ECTS)

BMG 120 Introduction to Modern Greek Literature BMG 130 Introduction to the theory of Literature LAS 150 Introduction to Theoretical Linguistics Three 200 Level BMG or LAS Courses (BMG 100, BMG 230245, BMG 246-261, BMG 262-277, BMG 278-293, BMG 294-299, BMG 200-214, BMG 215-229, LAS 200-259)

## E. THREE COURSES IN HISTORY ( 15 ECTS)

 Three 100 Level HIS Courses
## F. ONE PSYCHOLOGY COURSE (6 ECTS)

Any one of the following:
PSY 402 Theories of Mind and Consciousness PSY 321 Cognitive Science
G. TWO COURSES IN SOCIAL OR POLITICAL SCIENCE (12 ECTS)
Chosen from the following list of four courses:
SPS 154 Political Theory
SPS 281 Modern Political Thought
SPS 102 Classical Sociological Theories
SPS 211 Contemporary Sociological Theories

## H. THREE COURSES IN A CHOSEN FOREIGN LANGUAGE (15 ECTS)

I. THREE FREE ELECTIVE COURSES (15 ECTS)

TOTAL: 240 ECTS

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A. Five Compulsory Courses (25 ECTS)
    PHIL }101\mathrm{ Introduction to Philosophy
    PHIL }102\mathrm{ Introduction to Ancient and Modern Philosophy
    PHIL }103\mathrm{ Introduction to Epistemology and Metaphysics
    PHIL }104\mathrm{ Introduction to Logic
    PHIL }105\mathrm{ Introduction to Ethics
B. Two 200 Level PHIL Courses (10 ECTS)
C. Three 300 Level PHIL Courses (15 ECTS)
D. One 400 Level PHIL Course (10 ECTS)
TOTAL: 60 ECTS
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## FACULTY OF LETTERS


www.ucy.ac.cy/hisarch/en

## DEPARTMENT OF HISTORY AND ARCHAEOLOGY

The Department of History and Archaeology works towards the promotion of knowledge and research in the disciplines of History and Archaeology. Its chief activities are teaching (both at undergraduate and postgraduate levels) and research. Research is carried out at postgraduate and faculty level. In the field of Archaeology, the Archaeological Research Unit (A.R.U.) is also particularly active. The A.R.U. was founded in 1992 and was integrated into the Department of History and Archaeology in 1996. The A.R.U. covers all the archaeological activity of the Department that concerns Cyprus and it is in charge of teaching all the relevant postgraduate courses. It offers a full study programme for the undergraduates of the Department, as well as elective courses for students of other departments. These include courses taught by members of the A.R.U. that cover all aspects of Cypriot Archaeology, examined in relation to the cultures of neighbouring regions.

## CHAIRPERSON

Maria Parani
VICE-CHAIRPERSON
Stella Demesticha
PROFESSORS
Maria lacovou
Vasiliki Kassianidou
Theodoros Mavrogiannis
Apostolos Sarris
Chris Schabel

## ASSOCIATE PROFESSORS

Stella Demesticha
George Kazamias
Ourania Kouka
Angel Nicolaou-Konnari
Michalis Olympios
Petros Papapolyviou
George Papasavvas
Maria Parani
Athanasios Vionis

## ASSISTANT PROFESSORS

Anna-Anastasia Constantinidou
Dionysios Stathakopoulos

## LECTURER

Dimitrios Kontogeorgis

## OBJECTIVES OF THE DEPARTMENT

The Department offers a joint degree in History and Archaeology, with a specialization either in History or Archaeology. The degree allows our graduates to seek employment in a large number of sectors, bodies and institutions, such as secondary education, the archaeological service, the diplomatic service, research centres, archives, cultural foundations, museums, galleries, etc.

The Department's programme of studies aims at the scholarly preparation of the students in the two disciplines, and it functions in close partnership with the other two departments of the Faculty of Letters, as well as with other University departments. This offers students the opportunity to acquire the knowledge and skills necessary to teach in secondary education. The programme also prepares students to pursue studies at the postgraduate level and pursue a career in the field of History or Archaelogy.

## STRUCTURE OF THE PROGRAMME OF STUDIES

At the beginning of their studies, students follow a common syllabus for the first three semesters. Upon completion of the third semester, students choose to specialize in either History or Archaeology. Consequently, the degrees offered by the Department are (a) Degree of the Department of History and Archaeology, with a specialization in History, or (b) Degree of the Department of History and Archaeology, with a specialization in Archaeology.

100-Level Courses are introductory courses. They are compulsory for the Department's students; they are also open to students of other University's departments as elective courses.

200-Level Courses have as prerequisites the corresponding 100-Level Courses. The students of the Department of History and Archaeology must choose from these courses, in order to complete their programme of studies. Students of other departments may also enrol in them as elective courses, provided they have already successfully attended the corresponding 100-Level Course (or have the instructor's permission). The Department also teaches 200-Level Elective Training Courses in History and Archaeology.
300- Level Courses offered by the Department are seminars, which have as prerequisites the equivalent 200Level Courses. They are open to students of the Department who have successfully completed the fifth semester of their studies. Students must take three seminars in the specialization they have selected. The

Department will not approve changes to the programme of studies or the timetable.

## SPECIALIZATION IN HISTORY

The programme of studies for the degree with a specialization in History comprises 45 courses, structured as follows:

- Six Introductory 100-Level Courses in History
(Compulsory)
- Six Introductory 100-Level Courses in Archaeology (Compulsory)
- Thirteen 200-Level Courses in History distributed among the following thematic areas (Compulsory):
- Ancient History (2)
- Byzantine History (2)
- Medieval History (2)
- Early Modern and Modern Greek History (2)
- Early Modern and Modern European History (2)
- Contemporary Greek History (2)
- Post-war World (1)
- Two 200-Level Elective Courses offered by the Department in History or Archaeology
- Three 300-Level Courses (Seminars) in History 30
- Three Courses in Ancient Greek Philology 16
- Two Courses in Latin Philology 11
- One Course in Byzantine Philology 5
- Two Courses in Modern Greek Philology 10
- Four Elective Courses 20
- Three Courses in Foreign Language(s) 15

TOTAL 242

## SPECIALIZATION IN ARCHAEOLOGY

The programme of studies for the degree with a specialization in Archaeology comprises 45 courses, structured as follows:

- Six Introductory 100-Level Courses in History
(Compulsory) ..... 30
- Nine Introductory 100-Level Courses in Archaeology (Compulsory)30
- Thirteen 200-Level Courses in Archaeology distributed among the following thematic areas (Compulsory)
- Prehistoric and Protohistoric Archaeology (2)
- Classical Archaeology (3)
- Byzantine Archaeology (2)
- Byzantine Archaeology or History of Western Art (1)
- Material Culture of Modern Times (1)- Archaeometry (1)
- Three 200-Level Elective Courses offered by theDepartment in History or Archaeology15
- Three 300-Level Courses (Seminars) in Archaeology ..... 30
- Three Courses in Ancient Greek Philology ..... 16
- Two Courses in Latin Philology ..... 11
- One Course in Byzantine Philology ..... 5
- Two Courses in Modern Greek Philology ..... 10
- Three Elective Courses ..... 15
- Three Courses in Foreign Language(s) ..... 15
TOTAL ..... 242


## MINOR DEGREE IN HISTORY

For a minor degree in History, students must successfully complete 11 courses ( 60 ECTS). The courses required are the following:
A. Five Compulsory Introductory Courses ( 25 ECTS)

HIS 108 Introduction to Modern Greek History
HIS 112 Introduction to Byzantine History
HIS 134 Introduction to Medieval History
HIS 144 Introduction to Ancient History
HIS 181 Introduction to European History (1789-1918)

## B. Five 200-Level Courses ( 25 ECTS),

from those offered every semester by the Department of History and Archaeology.
C. One 300-Level Seminar (10 ECTS),
from those offered every semester by the Department of History and Archaeology.

## MINOR DEGREE IN ARCHAEOLOGY

For a minor degree in Archaeology, students must successfully complete 11 courses ( 60 ECTS). The courses required are the following:

## A. Five Compulsory Introductory Courses ( 25 ECTS)

ARC 118 Introduction to the Mediterranean Bronze Age Cultures
ARC 123 Introduction to Classical Archaeology I (Geometric - Classical period)
ARC 132 Introduction to Byzantine Art and Archaeology ARC 140 Introduction to Folk Art-Traditional Craftsmen ARC 141 Introduction to Environmental Archaeology

## B. Five 200-Level Courses ( 25 ECTS)

from those offered every semester by the Department of History and Archaeology.

## C. One 300-Level Seminar (10 ECTS)

from those offered every semester by the Department of History and Archaeology.

## ADMISSION, CONDITIONS FOR ADMISSION, SELECTION

Fifteen students are admitted to each minor degree programme every year. Students may register for the programme during the third or the fifth semester of their main studies. Application and registration take place during the fall semester. The minor degree begins in the spring semester of each academic year. Courses in History (for the minor degree in History) and courses in Archaeology (for the minor degree in Archaeology) that the students may have already passed during their main programme of studies will be recognized as part of the minor degree.

Criteria for selection are the student's academic record (minimum grade 7/10) and the consent of the Chairs of the two relevant Departments.

## COURSE DESCRIPTIONS

## FALL SEMESTER

HIS 105 Introduction to Historical Studies, Methodology and Philosophy of History (5 ECTS)
General theoretical issues. The formation of historiographic tradition (before historiography, birth and development of historiography from the beginning until the mid-19th century, formation of the modern discipline of history and methodology, new trends, interdisciplinarity of contemporary historiography). The technique of historical research. Writing history (preparation, collection, archiving and processing historical material, analysis of historical data, synthesis).

## HIS 108 Introduction to Modern Greek History (5 ECTS)

Introduction to Modern Greek historiography and a brief view of modern and contemporary Greek history from Ottoman rule to the fall of the dictatorship in Greece and the Turkish invasion of Cyprus. A survey that examines the historical sequence of events, the development of political and state institutions, and social and political changes.

HIS 134 Introduction to Medieval History (5 ECTS)
Basic chronological survey of the main events and currents in the West from the decline and fall of the Western Roman Empire to the Protestant Reformation. Students take a midterm examination that covers the Early Middle Ages (until 1000) and the High Middle Ages until 1191. The final examination stresses the second half of the High Middle Ages (1191-1300) and the Late Middle Ages (1300-1525). Students also write a paper analysing a recent scholarly article.

## HIS 144 Introduction to Ancient History (5 ECTS)

Greek and Roman History from the "Dark Ages" to the Late Roman Empire. The course is divided into three main parts: a) Consideration of the available sources, b) Ancient Greek History: From the end of the Mycenaean Period to the end of the Hellenistic Period, and c) Roman History: From the 8 th century BC to the end of Late Antiquity.

## HIS 181 Introduction to Modern European History (1789-1918) (5 ECTS)

This is an introductory, "broad brush" survey of the history (mainly political) of Europe from the French Revolution to the end of the First World War. Themes that are developed in the course include: The French Revolution - Napoleonic Europe - The Congress of Vienna - The Revolutions of 1830 and 1848 - Napoleon III - The Eastern Question - The unifications of Italy and Germany - The scramble for Empire - The origins of the First World War - The outbreak and the course of First World War - The Russian Revolution - The end of the First World War.

## ARC 117 Introduction to Prehistory (5 ECTS)

The course will introduce students to the Prehistory of the Eastern Mediterranean. The chronological periods which will be covered are the Neolithic and the Chalcolithic, as well as questions relating to the transition to the Bronze Age. The course will focus on issues such as the way of life in these first farming communities, architecture, burial customs and technology. As an integral part of the course, there will be visits to the Archaeological Museum of Nicosia (Cyprus Museum), as well as archaeological sites of this period.

## ARC 123 ntroduction to Classical Archaeology I <br> (Geometric-Classical Periods) (5 ECTS)

The course examines the period from 1100-330 BC, i.e. it comprises the Geometric, Archaic and Classical eras. It presents the specific character of each period and analyses its achievements. It is based on a presentation of representative monuments of each period and on the analysis of works of sculpture, vase painting, architecture and metalworking. Furthermore, it investigates phenomena such as the appearance of myths in Greek art,
the establishment of the human figure at the centre of artistic representation, and the quests that led to the genesis of monumental sculpture and Greek temples.

ARC 132 Introduction to Byzantine Art and Archaeology (5 ECTS)
This course aims to introduce students to Byzantine material culture and secular and religious art from the 4th century down to the fall of the Byzantine Empire in A.D. 1453. It is structured as a survey of representative works of art from various artistic media, including architecture, sculpture, monumental painting (mosaics and frescoes), illuminated manuscripts, panel icons, and the minor arts. One of the main objectives of this course is highlighting the diversity and the salient characteristics of artistic expression in Byzantium, as well as investigating the role that art played in the lives of the Byzantines, both in the private and public spheres.

## ARC 140 Introduction to Folk Art-Traditional Craftsmen (5 ECTS)

Definition of Folk Culture, Folk/Traditional Art, Folklore, Ethnology, Ethnography, Cultural Anthropology, etc.
-Ethnography - Folklore in its modern perspective

- Survey of research
- Methods, sources and importance of Folk Art
-The role of Ethnographic Museums
- Historical background
- Socio-economic conditions
- Traditional Craftsmen
- Methods of recording traditional crafts
- Processing of raw materials


## SPRING SEMESTER

## HIS 112 Introduction to Byzantine History (5 ECTS)

The course aims at familiarizing students with the history of the Byzantine empire from 330 to 1453 . Following a chronological approach, we will survey the long and complex history of this resilient state that underwent many crises but managed to successfully adapt to the changing geopolitical, socio-economic and cultural landscape around it. We will follow this state from its roots in the late Roman empire, through rivalries with enemies from the East (Persians, Arabs, Seljuq and Ottoman Turks), the West (Goths, Lombards, Franks, Normans and Italians) and the North (Slavs, Bulgars, Rus, Serbs). The course will explore the political institutions, social structures, economic organization and cultural production of Byzantium and place its history in the framework of the wider global history and culture.

HIS 144 Introduction to Ancient History (5 ECTS)
See Fall Semester above.

## ARC 118 Introduction to the Mediterranean Bronze Age Cultures (5 ECTS)

Introductory course on the archaeology of the Mediterranean cultures during the Bronze Age. The geographical co-ordinates of the course are defined by the Greek peninsula to the west and by the SyroPalestinian coast to the east. Although the emphasis is placed upon the development of the Aegean Bronze Age cultures - the Trojan, the Cycladic, the Helladic and the Minoan - an elementary introduction is also provided for the Egyptian, the Canaanite and the Cypriote Bronze Age cultures in the Eastern Mediterranean.

ARC 124 Introduction to Classical Archaeology II (Hellenistic and Roman Periods) (5 ECTS)
General survey of the Hellenistic and Roman world: Hellenistic Kingdoms (323-30 BC), early Rome (264-30 BC) and the Roman Empire ( $27 \mathrm{BC}-4$ th cent. A.D.). Main stages of development and characteristics of the two periods. Presentation and analysis of key monuments and works of art.

## ARC 141 Introduction to Environmental Archaeology

 (5 ECTS)Environmental Archaeology studies the morphology of the ground, plant, animal and even human remains, relics of ancient agricultural activities, and other issues relating to the ancient environment. The study of all these enables us to reconstruct the ancient environment. By studying environmental archeology we learn about the whole of human life in the past. The course will introduce students to the various fields of Environmental Archaeology
(Geoarchaeology, Archaeobotany, Zooarchaeology and Palaeopathology) and the methods applied in each of these for the study of ancient environmental remains.

## ARC 150 Introduction to the History of Western Art

 (4th-18th C.) (5 ECTS)An overview of Western European art from Late Antiquity to Rococo. Discussion will focus on representative works of architecture, sculpture, painting and the minor arts from each individual period (Early Christian, Early Medieval, Romanesque, Gothic, Renaissance, Mannerism, Baroque and Rococo). The course aims to familiarize students with issues of periodization and current methodological approaches to the examination and analysis of works of art.

ARC 180 Introduction to Maritime Archaeology (5 ECTS)
The purpose of the course is to introduce students to Maritime Archaeology, so that they can: a) understand that its particular character lies in the interpretative approach of material remains, as parts of maritime civilization, b) study the archaeological remains pertinent to the scope of the domain, and c) learn about the special methods and techniques used in underwater archaeology. Upon completion of the course, students are expected to a) have acquired basic knowledge in the following thematic areas: methods and techniques of underwater archaeology, ancient shipbuilding and ship types, pre-industrial seafaring, coastal changes related to natural phenomena, types of ancient harbours, and history of maritime archaeology; b) to have understood that underwater is only a part of maritime archaeology, which is not limited by the environment where the antiquities are found.

TABLE I: ANALYTICAL PROGRAMME OF STUDIES FOR THE FIRST FOUR SEMESTERS

|  | ECTS |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1 st Semester |  | 4th Semester |  |
| Fall Semester |  | Spring Semester |  |
| ARC 117 Introduction to Prehistory | 5 | For students specializing in History: |  |
| ARC 123 Introduction to Classical Archaeology I |  | HIS | 5 |
| (Geometric - Classical period) | 5 | HIS | 5 |
| HIS 105 Introduction to Historical Studies, |  | HIS | 5 |
| Philosophy and Methodology of History | 5 | AEF One course in Ancient Greek Philology | 5 |
| HIS 144 Introduction to Ancient History | 5 | LAT One course in Latin Philology | 5 |
| BMG 100 Reading Byzantine Texts | 5 | BMG One course in Modern Greek Philology | 5 |
| BMG 120 Introduction to Modern Greek Philology | 5 | TOTAL | 30 |
| TOTAL | 30 |  |  |
|  |  | For students specializing in Archaeology: |  |
| 2nd Semester |  | ARC 141 Introduction to Environmental Archaeology | 5 |
| Spring Semester |  | ARC 150 Introduction to the History of Western Art |  |
| ARC 118 Introduction to the Mediterranean Bronze |  | (4th-18th century) | 5 |
| Age Cultures | 5 | ARC 180 Introduction to Maritime Archaeology | 5 |
| ARC 124 Introduction to Classical Archaeology II |  | AEF One course in Ancient Greek Philology | 5 |
| (Hellenistic and Roman periods) | 5 | LAT One course in Latin Philology | 5 |
| HIS 112 Introduction to Byzantine History | 5 | BMG One course in Modern Greek Philology | 5 |
| AEF 131 Ancient Greek Prose Composition | 6 | TOTAL | 30 |
| LAT 195 Latin Prose Composition | 6 | GRAND TOTAL | 152 |
| BMG One course in Modern Greek Philology | 5 |  |  |
| TOTAL | 32 |  |  |
| 3rd Semester |  |  |  |
| Fall Semester |  |  |  |
| ARC 132 Introduction to Byzantine Art and |  |  |  |
| Archaeology | 5 |  |  |
| ARC 140 Introduction to Folk Art - Traditional |  |  |  |
| Craftsmen | 5 |  |  |
| HIS 108 Introduction to Modern Greek History | 5 |  |  |
| HIS 134 Introduction to the History of the |  | Note: |  |
| Medieval West | 5 | Students of the Department must have completed ALL |  |
| HIS 181 Introduction to Modern European History | 5 | Compulsory Courses from the Departments of History and |  |
| AEF One course in Ancient Greek Philology | 5 | Archaeology, Classics and Philosophy and Byzantine and |  |
| TOTAL | 30 | Modern Greek Studies by the 4th Semester of their studies. |  |

## TABLE II: COURSES OFFERED

|  | ECTS |  |  | ECTS |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |
| Fall Semester |  | Spring Semester |  |  |
| ARC 117 | Introduction to Prehistory |  |  |  |

## medicine




MEDICAL SCHOOL

www.ucy.ac.cy/medical/en

## MEDICAL SCHOOL

## INTERIM DEAN

Professor loannis Giapintzakis

## ASSOCIATE DEAN

Professor Georgios Hadjigeorgiou

## PROFESSORS

Constantinos Deltas
Stavros Gravas
loannis Pnevmatikos
Panayiotis Yiallouros
Zacharias Zachariou
ASSOCIATE PROFESSORS
Dimitrios Farmakis
Georgios Nikolopoulos

## ASSISTANT PROFESSORS

Panagiotis Bargiotas
Anastasia Constantinidou
Nikolas Dietis
Nikolaos Gouvas
Maria Koliou
Anneza Yiallourou
Panagiotis Zis

## LECTURERS

Pinelopi Anagnostopoulou
Andreas Chatzittofis
Nikoletta Dimitriou
Nikolaos Kadoglou
Konstantinos Parperis

Note: The Medical School also employs a number of Visiting Professors, Special Teaching Staff, Special Scientists and Special Scientists - Medical Doctors.

## INTRODUCTION

The University of Cyprus Medical School accepted its first students in September 2013. The Medical School offers a complete undergraduate Medical Programme (MD) in Cyprus, a six-year programme based at the University of Cyprus and at affiliated hospitals in Nicosia (Nicosia General Hospital, Archbishop Makarios III Hospital, Health Centres, Bank of Cyprus Oncology Center and Cyprus Institute of Neurology and Genetics). Students, who successfully complete the programme, will graduate as qualified medical practitioners.

In addition to the standard medical curriculum, the UCY medical degree programme emphasizes critical thinking skills, lifelong learning and excellence in patient-centred clinical practice. By offering an innovative undergraduate curriculum underpinned by the academic excellence of the University of Cyprus, the new programme will train medical doctors fully qualified to practice in today's world.

## PROGRAMME

The Programme is divided into three phases:

- Phase I: one year pre-medical studies in basic sciences.
- Phase II: two years integrated basic medical sciences including behavioral principles.
- Phase III: three years clinical studies.

The programme is taught and assessed in Greek, with a limited number of lectures in English. Students have the option to do their required presentations in Greek or English.

The programme has been drawn from well-regarded and long-established European medical schools, and has developed its own comprehensive as well as unique medical sciences curriculum, adapted to the needs and the environment of Cyprus.

The expertise and resources of the University of Cyprus are supplemented with newly appointed international experts who assist in developing the educational, research and administrative components of the new Medical School.

The students of the Medical School have the opportunity to participate in the School's research programmes and present their papers at national and international conferences.

For more information, please contact the Medical School Secretariat tel.: 22894352, e-mail: medical@ucy.ac.cy or visit the Medical School's website at www.ucy.ac.cy/medical-en.

## Pure \& applied sciences




# FACULTY OF PURE AND APPLIED SCIENCES 

Department of Biological Sciences
Department of Chemistry
Department of Computer Science Department of Mathematics and Statistics Department of Physics

www.ucy.ac.cy/biol/en

## DEPARTMENT OF BIOLOGICAL SCIENCES

Biology lies at the forefront of scientific discovery and public attention at a global level, since in the past few decades our understanding of life has increased at an unprecedented rate, from the molecular and cellular level to that of the biotic communities and ecosystems. At the same time, biological sciences contribute to the interdisciplinary nature of modern research, uniting traditional disciplines and opening up new areas of interdisciplinary research.

In addition to the deeper understanding of nature, the function and evolution of all living beings as well as, the phenomenal increase of our knowledge on biological systems, leads to novel and exciting applications in a variety of domains, such as health (understanding diseases, genetic diagnoses, new treatment strategies using stem cells, etc.), drug industry (drug design, pharmacogenomics, etc.), agricultural production and food industry (organic and sustainable practices, genetically improved plants and animals, aquaculture, etc.), sustainable use of biological resources (fisheries, forestry, etc.), and conservation.

## CHAIRPERSON

Antonis Kirmizis
VICE-CHAIRPERSON
Alexander N. G. Kirschel
PROFESSORS
Leondios G. Kostrikis
Niovi Santama
Spyros Sfenthourakis
ASSOCIATE PROFESSORS
Yiorgos Apidianakis
Pantelis Georgiades
Antonis Kirmizis
Alexander N. G. Kirschel
Chrysoula Pitsouli
Vasilis J. Promponas
Paris A. Skourides
Katerina Strati
ASSISTANT PROFESSOR
Anna Papadopoulou

## OBJECTIVES

The main objectives of the Department are:

- To develop competitive research programmes in fields like immunology, cell biology, developmental biology, embryology, bioinformatics, genetics, epigenetics, virology, neurobiology, and cancer treatment and prevention, as well as in evolution, ecology, biodiversity and sustainable use of its components.
- To offer high quality education and training to students, so that they become competitive at a global scale.
- To offer high quality services to the public and private sectors in Cyprus, with special consideration to public health and the environment.


## UNDERGRADUATE PROGRAMME OF STUDY

It offers a good background in scientific principles and all fields of Biology.

Graduates may continue their studies in postgraduate programmes in Cyprus or abroad, or find employment in areas such as education, clinical and diagnostic labs, the pharmaceutical industry, medicinal and genetic research, biotechnology, biomechanics, aquaculture, organic farming, environmental impact studies, environmental management, biodiversity conservation.

## Courses offered by the Department of Biological

 Sciences
## Compulsory Courses

- BIO 102 Principles of Biology I
- BIO 111 Principles of Biology II
- BIO 201 Genetics
- BIO 202 Molecular Biology
- BIO 221 Biochemistry I
- BIO 222 Biochemistry II
- BIO 230 Introduction to Computational Biology
- BIO 241 Laboratory Methods and Techniques I
- BIO 242 Laboratory Methods and Techniques II
- BIO 301 Ecology
- BIO 302 Molecular Cell Biology
- BIO 361 Introduction to Developmental Biology
- BIO 371 Microbiology
- BIO 382 Animal Physiology
- BIO 401 Evolutionary Biology
- BIO 451 Epigenetics
- BIO 471 Immunology
- BIO 481 Zoology
- BIO 482 Botany
- BIO 490 Search and Management of Bibliographic Sources
- BIO 491 Undergraduate Thesis I
- BIO 492 Undergraduate Thesis II


## Restricted Elective Courses

- BIO 311 Molecular and Cellular Neuroscience
- BIO 331 Computational and Systems Biology
- BIO 350 Development and Genetics of Model Organisms
- BIO 351 Human Molecular and Medical Genetics
- BIO 353 Evolutionary Genetics and Genomics
- BIO 354 Systems Biology
- BIO 355 Gene Regulation
- BIO 362 Special Topics in Developmental Biology
- BIO 365 Stem Cells
- BIO 372 Bacterial Pathogenesis
- BIO 381 Plant Physiology
- BIO 402 Advanced Issues in Ecology
- BIO 403 Marine Biology
- BIO 404 Environmental Pollution
- BIO 405 Phylogenetics
- BIO 406 Ornithology
- BIO 408 Ecophysiology
- BIO 409 Conservation Biology
- BIO 410 Biodiversity of Cyprus
- BIO 411 Behavioural Ecology
- BIO 413 Biogeography
- BIO 414 Field Course
- BIO 415 Statistical Methods in Ecology
- BIO 423 Molecular Oncology
- BIO 424 Microscopic Techniques
- BIO 431 Advanced Topics in Computational and Systems Biology
- BIO 432 Clinical Bioinformatics
- BIO 434 Principles of Structural Biology
- BIO 461 Experimental Embryology
- BIO 462 Advanced Topics in Molecular Embryology
- BIO 472 Virology
- BIO 473 Advanced Topics in Cellular and Molecular Immunology
- BIO 474 Hot Topics in Infectious Diseases
- BIO 475 Viral Ecology
- BIO 495, 496, 497, 498, 499 Current Topics in Biology

Courses Offered by Other Departments

- PHY 102 Physics for Biologists and Chemists
- MAS 001 Mathematics I
- MAS 002 Mathematics II
- MAS 030 Introduction in Probability and Statistics
- LAN 100 General Advanced English
- LAN 103 English for Biomedical Sciences
- CHE 021 Introductory Chemistry (for Biologists and Physicists)
- CHE 030 Organic Chemistry Lab for Students of Biology
- CHE 031 Organic Chemistry for Students of Biology
- Free Elective Course
- Free Elective Course
- Free Elective Course


## Optional Courses for Students of the Department

- BIO 442 Internship in Biology
- BIO 444 Student Placement in Other Institutions


## Courses available in English for Erasmus students

- BIO 230 Introduction to Computational Biology
- BIO 301 Ecology
- BIO 401 Evolutionary Biology
- BIO 471 Immunology
- BIO 442 Internship in Biology *
- BIO 491 Undergraduate thesis I*
- BIO 492 Undergraduate thesis II*
* These courses are personalized and are taught in either Greek or English according to each student's language level.


## COURSE DESCRIPTIONS

## Compulsory Courses

BIO 102 Principles of Biology I (7 ECTS)
An introductory course on the biology of organisms, providing an integrative overview of a wide array of organisms, starting with bacteria and archaea, moving to the protists and fungi and finally examining multicellular eukaryotes. The course presents life in an evolutionary context and stresses solutions imposed on organisms by their environment. Special emphasis is given to organisms that are important model systems in modern biological research and additionally, seminal discoveries using these model systems are also described. Other topics covered include basic taxonomy, concepts of cell biology, biological molecules and biodiversity.

## BIO 111 Principles of Biology II (7 ECTS)

This foundation course will introduce students to key concepts of Modern Molecular Biology, Genetics and Virology. Topics include: principles and methodology of prokaryotic and eukaryotic genetics; chemical, molecular and functional properties of the genetic material; applications of recombinant DNA technology; the
fundamental aspects of molecular virology and of human diseases.

## BIO 201 Genetics (6 ECTS)

The course focuses on the basic principles of genetics by presenting the important concepts of classical genetics and the scientific process by showing how scientific concepts develop from observation and experimentation. Numerous examples are provided to show how genetic principles have emerged from the work of different scientists.

Science is an ongoing process of observation, experimentation, and discovery. We incorporate human examples showing the relevance of genetics to societal issues. Students are keenly interested in the genetics of their own species and they find it easier to comprehend complex concepts, when these concepts are illustrated with human examples. We develop critical thinking skills by emphasizing the analysis of experimental data and problems.

The course comprises 8 chapters: Chapters 1-2 introduce the science of genetics, basic features of cellular reproduction, and some of the model genetic organisms. Chapters 3-8 present the concepts of classical genetics Mendelism and its extensions, and the chromosomal basis of inheritance per Morgan and colleagues - as well as the basic procedures for the genetic analysis of microorganisms.

## BIO 202 Molecular Biology (6 ECTS)

From DNA to protein: the mechanisms in the flow of genetic information and their regulation. DNA replication, recombination, repair. Dynamic chromatin structure.

RNA transcription and mechanisms of regulation of gene expression. RNA splicing and post-transcriptional processing. Non-coding RNAs (microRNAs, siRNAs, piRNAs, long ncRNAs). Protein synthesis and post-translational processing of proteins. Topology of the flow of genetic information in the nucleus, nuclear architecture and nuclear organelles. Nucleocytoplasmic import and export mechanisms. Techniques for the analysis of the flow of genetic information.

## BIO 221 Biochemistry I (6 ECTS)

The course is designed to provide an understanding of the physical, structural and functional properties of the main chemical components of living matter and of the core cellular metabolic pathways. The course focuses on the three major classes of biological molecules: proteins, carbohydrates and lipids and their building blocks. It examines their chemical properties and their threedimensional structure as the basis of their biological properties and function. It presents analytical and research laboratory techniques for their isolation and characterization. Main topics include: Introductory
concepts and principles of thermodynamics; Amino acids; Protein structure and function; Hemoglobin: the Perutz model on structure and function, understanding its genetic disorders; Enzymes: basic mechanisms of enzyme kinetics, modes of inhibition, and regulation of enzymatic activity; Sugars and Polysaccharides; Principles governing metabolism; The major catabolic pathways: glycolysis, Krebs cycle, oxidative phosphorylation; Lipids and biological membranes; Lipid metabolism: $\beta$-oxidation, lipid synthesis, metabolism of cholesterol.

## BIO 222 Biochemistry II (6 ECTS)

The course is designed to examine selected topics in Biochemistry, including hormones: molecular physiology of endocrine system, the hypothalamus-hypophysis axis, hormonal control of biochemical processes, metabolic disorders. Signal transduction: receptors, G proteins, second messenger systems and intracellular cascades. Enzyme-linked receptors and their intracellular cascades. Genetic, cellular and organismal responses to hormone signaling. Advanced research and diagnostic techniques in Biochemistry and Clinical Biochemistry (RIA, ELISA).

## BIO 230 Introduction to Computational Biology (6 ECTS)

Through lectures and laboratory work, this course will demonstrate how Computational tools have revolutionized modern biological research with an emphasis on nucleic acid and protein sequence and structural analysis. It also includes an introduction to the analysis of complex biological systems. Lectures cover principles and methods used for sequence alignment, motif finding, structural modeling, structure prediction and network modeling. Laboratory practicals include examples on power usage of state-of-the-art methods/tools related to the topics covered in the lectures, and student mini-research projects based on programming and analysis of real-world datasets.

## BIO 241 Laboratory Methods and Techniques I (6 ECTS)

This course focuses on various experimental techniques widely used in Biochemistry. It also includes extensive practice in scientific style writing. It emphasizes integration of factual knowledge and understanding the design of experiments and data analysis, thus promoting critical thinking skills. Students first learn how to perform simple calculations (dilutions, concentrations, pKa values, extinction coefficients and absorbance using Beer's Law) and how to use basic laboratory equipment (pipettes, scale, pH meter, centrifuge, spectrophotometer). They are then introduced to spectroscopic methods for determination of enzyme kinetics and to various techniques for protein extraction, quantification and characterization including SDS-PAGE, Western Blot, Dot Blot, ELISA, and immuno-fluorescence.

## BIO 242 Laboratory Methods and Techniques II (6 ECTS)

 Prerequisite: BIO 241This course provides students with a research-inspired laboratory experience, introducing standard techniques of Molecular Biology, in the context of cloning a gene of
interest from genomic DNA. Techniques include: DNA extraction from tissue and bacteria cultures, DNA manipulation (PCR, agarose gel electrophoresis, agarose gel extraction and transformation), X-gal blue/white screening, Restriction Enzyme digests, RNA isolation and characterization, cDNA synthesis (RT-PCR) and analysis.

This course also provides students with a diagnostic laboratory experience, introducing standard techniques of histology (fixation, processing, embedding in paraffin wax sectioning with microtome and H\&E staining)

## BIO 301 Ecology (6 ECTS

Introduction to Ecology. Interactions of biological systems with their environment. Principles and concepts of population and community ecology. The various concepts of niche and habitat. Life history tables. Cost-benefit analysis. The ecosystem approach. Energy flow and biogeochemical cycles. Productivity and food webs. The course includes laboratory practicals and short field trips in which students become familiar with basic ecological techniques.

BIO 302 Molecular Cell Biology (6 ECTS)

## Prerequisite: BIO 201

This is a comprehensive core course in Molecular Cell Biology providing a robust foundation in the understanding of structure-function relationship in the dynamic organization of the eukaryotic cell that underlies biological processes. Topics covered are: An introduction to the basic concepts of organization and function of the eukaryotic cell; Biological membranes, their dynamic structure and function; Intracellular compartments, protein sorting and modification; Intracellular vesicular traffic, secretion and the endocytotic pathway; Cytoskeleton and molecular motors; Cellular junctions and organization of the extracellular matrix; Nuclear organization and nucleocytoplasmic transport; Cell cycle, overview and its regulation; Apoptosis; Research techniques and Microscopy in Modern Molecular Cell Biology

## BIO 361 Introduction to Developmental Biology (6 ECTS)

The course aims to (a) introduce the basic idea of Developmental Biology and argue that even though it is extremely important for Medicine (e.g. Regenerative Medicine and Obstetrics/Gynecology) and Science, it is still not completely understood, (b) explain its basic concepts and processes and (c) discuss specific and clinically important aspects of the earliest events of mammalian development (from studies in mice and humans). The course includes discussions about important concepts and processes of Developmental Biology that apply to all animals (including vertebrates), such as the role of cells and genes in embryonic development, differentiation, pattern formation and morphogenesis. Emphasis will be given to important events of early mammalian development that take places within a few days after fertilization.

## BIO 371 Microbiology (6 ECTS)

The course offers an overview of microorganisms, including bacteria, archaea, viruses and eukaryotic microorganisms. Topics include microorganism structure, metabolism, and genetics. We will examine the diversity of microbial lifecycles, as well as the role of microorganisms in ecology, disease, and biotechnology applications. Recent advances in the field will be highlighted.

## BIO 382 Animal Physiology (6 ECTS)

The course offers an overview on Animal Physiology with particular emphasis on the human body. The main topics include the nervous system, the muscular system, the cardiovascular system, the respiratory system, the digestive system, the urinary system and part of the endocrine system focusing on the metabolism.

## BIO 401 Evolutionary Biology (6 ECTS)

The course covers basic macro- and microevolution and the history of Evolutionary Biology. Topics include natural and sexual selection, genetic drift and gene flow, phylogenetics and biogeography, speciation, co-evolution, species concepts, population genetics and systematics.

## BIO 451 Epigenetics (6 ECTS)

## Prerequisite: BIO 201

The characteristics of a cell or an organism depend on more than just the sequence of bases in its DNA; they are also affected by the structure of chromatin. This demonstration introduces epigenetics, a phenomenon that underlies the differentiation of cells in a complex multicellular organism, and explains some heritable traits that are independent of DNA sequence.

## BIO 471 Immunology (6 ECTS)

## Prerequisites: BIO 201, BIO 202 and BIO 221

The course is a critical thinking approach to introductory Immunology, with attention to the genetics, molecular, and cell biology of antibody production; T-cell mediated immune responses and an emphasis on the fundamental role of innate immunity. Lectures explain the intertwined nature of antigens, non-self vs. self-recognition, transplantation, cytokines, autoimmunity, cancer, response to infection, and vaccines. A laboratory experiment is performed as a demonstration of the impact of innate immunity and the importance of research on immunological specificity and memory.

## BIO 481 Zoology (6 ECTS)

Evolution and divergence of animal phyla. Main morphological characteristics, systematics, ecology and behavior of major animal phyla. Special emphasis on larger phyla, such as Cnidaria, Platyhelminthes, Annelida, Nematoda, Mollusca, Arthropoda, Echinodermata and Chordata. The course includes laboratory practicals and
field trips in order to familiarize students with the identification and anatomy of major animal groups.

## BIO 482 Botany (6 ECTS)

This course considers the fundamental biological principles as they apply to plants. The plant cell and the basic organization of the plant body. Evolution and differentiation of plants. The major groups of plants and their most important characteristics. Structure and function of the organs of representative plants will be considered.

## BIO 490 Search and Management of Bibliographic Sources (1 ECTS)

The seminar, which is is organized by the Library of the University in collaboration with the Department of Biological Sciences, is designed to introduce students to electronic Information services offered by the Library of the University of Cyprus, as well as techniques and strategies for searching bibliographic databases and library catalogues via the use of Boolean operators. The use of the software package "RefWorks" is discussed as a tool for gathering, storing and managing bibliographies and citations. Successful completion of this seminar is a prerequisite for undergraduate thesis courses. Students who sign up for the course BIO 491 Undergraduate Thesis I in the Spring semester, must also concurrently sign up for the course BIO 490.

BIO 491, 492 Undergraduate Thesis I, II (13-14 ECTS)

## Prerequisite: BIO 241

The thesis can either be carried out in a laboratory or be of a bibliographical nature. Students who choose to carry out their thesis in a laboratory, must secure a position in one of the available laboratories in consultation with their academic advisor. A bibliographical thesis is carried out under the supervision of a thesis advisor who is also responsible for the topic selection.

## Restricted Elective Courses

## BIO 311 Molecular and Cellular Neuroscience (6 ECTS)

Neurons and Glia, the cell types of the nerve tissue. The basic architecture of the nervous system in vertebrates. Ion homeostasis, electrochemical gradients, gated ion channels and membrane potential. The generation and propagation of action potential in neurons and its characteristics. Synaptic communication, the neuromuscular junction, classical and non-classical neurotransmitters. The glutamatergic synapse and synaptic plasticity. The molecular basis of senses: vision, touch, hearing, taste, smell. Model systems and current research techniques in Molecular and Cellular Neuroscience.

## BIO 331 Computational and Systems Biology (6 ECTS)

Computational approaches are key to understanding biological systems. This course offers a broad introduction to concepts and tools from Computer Science and their
practical applications in solving real-life biological problems. This is achieved through a series of introductory lectures and hands-on exercises, covering an array of topics including: foundational concepts of modern operating systems, network architectures and applications, online databases and tools for biological data, introduction to problem solving techniques and programming in a high level programming language (Perl or Python), principles of quantitative biological data analysis in the R language/ environment for statistical computing.

## BIO 350 Development and Genetics of Model Organisms

 (6 ECTS)This course provides an overview of the model organisms used in basic biomedical research. A historical perspective of the studies in worms, flies, mice, fish, planarians and plants will be presented, with a focus on the developmental mechanisms governing body plan formation. In addition, special emphasis will be given to the pros and cons of each organism, the availability of genetic tools, methods and resources that facilitate scientists working on these systems.

## BIO 351 Human Molecular and Medical Genetics (6 ECTS)

The course examines the molecular basis of inheritance, the genetic code and the flow of genetic information. Mendelian laws of inheritance and presentation of diseases with autosomal-dominant, autosomal-recessive, X-linked and mitochondrial inheritance, mutations and polymorphisms in the human genome. Description of examples of monogenic disorders with reference to the Cypriot population (Thalassaemia, Cystic Fibrosis, Muscular Dystrophy, Familial Mediterranean Fever, inherited nephropathies, neuropathies, cancer), and description of special phenomena such as founder effects, gene flow, genetic drift, reduced (or incomplete) penetrance, clinical and phenotypic heterogeneity. Brief description of principles of population genetics and Hardy-Weinberg equilibrium. The significance of genome-environment interactions; approaches to applications of molecular diagnostics. There is also discussion of the dilemmas resulting from contemporary molecular genetics applications.

## BIO 353 Evolutionary Genetics and Genomics (6 ECTS)

The course explores the genetic and genomic mechanisms underlying evolutionary change. Special emphasis is given to complex trait evolution and its quantitative analysis, and the impact of modern mapping and genomic techniques on evolutionary biology. Topics include, but are not limited to, the genetics of adaptation and character regression; the evolution of complex characters and traits such as organ systems, the senses, and patterns of behavior; and methods for the study of quantitative trait locus (QTL) variation and multifactorial systems.

## BIO 354 Systems Biology (6 ECTS)

Introduction to genomic methods for acquiring and analyzing genomic DNA sequence. Topics: genomic approaches to determining gene function, including determining genome-wide expression patterns; the use of genomics for disease-gene discovery and epidemiology; the emerging fields of comparative genomics and proteomics; and applications of genomics to the pharmaceutical and biotech sectors. Throughout the course, there is a special focus on computational methods for analysis of genomic data.

## BIO 355 Gene Regulation (6 ECTS)

All cells in an organism contain the same genomic material but the variability in gene expression among cells defines the cell type and function. The aim of this course is to familiarize students with the variety of mechanisms responsible for regulating the expression of genes in eukaryotic cells. Detailed molecular mechanisms that operate at different levels, such as during transcription, RNA processing, and translation, will be discussed. In addition, teaching will focus on the organization and packaging of the genetic material in eukaryotic cells and the implications that this has on gene expression. The lectures will introduce a wide range of model organisms and experimental approaches that are used to study the regulation of gene expression.

## BIO 362 Special Topics in Developmental Biology (6 ECTS)

Detailed analysis of selective topics in mammalian developmental biology (including humans), with emphasis on early embryogenesis, organogenesis and embryo derived stem cells. Important research papers will be presented and discussed in class and students will be required to interpret and discuss their significance.

## BIO 365 Stem Cells (6 ECTS)

The course introduces the concept the "stem cell", the different types of stem cells and their significance to Medicine and in particular to Regenerative Medicine. Adult stem cells and their importance to human health is discussed. Focus is given to the current knowledge of the cellular and genetic basis of the extraordinary properties of embryo-derived stem cells (such as "embryonic stem cells") in both mice and humans and their potential uses in Regenerative Medicine. This course is expected to allow students to critically evaluate the significance and future prospects of stem cells.

## BIO 372 Bacterial Pathogenesis (6 ECTS)

The course explores the mechanisms by which bacterial pathogens cause disease in humans and animals. Students learn the strategies that bacterial pathogens use to survive and multiply within their hosts, as well as the strategies hosts use to fend off infections. Lectures focus on the core principles of the underlying similarities among pathogens
and their mechanism of action. Thought-provoking exercises are deployed to convey the excitement and fun of the scientific discovery.

## BIO 381 Plant Physiology (6 ECTS)

Introduction to the physiology, biochemistry, and development of plants. There is emphasis on the physiological basis for structural adaptations of plants in relation to environmental constraints and on mechanisms leading to developmental and physiological integration at the whole plant level. Understanding of plant physiological processes is necessary for optimized productivity, e.g. industrial products (manufactured fibers, lumber, essential oils, pharmaceuticals) or other massively consumed products (cereal, vegetables, floricultural). Basic principles and current trends in plant physiology (based on recent research) are presented. Topics include: Principles of plant cell biology, hormones, long-range solute transport, nutrients, photosynthesis, nitrogen and sulfur, carbo-hydrate metabolism, respiration and photorespiration, external stimuli and signaling. Laboratory sessions provide an introduction to basic measurement techniques in plant physiology.

## BIO 402 Advanced Issues in Ecology (6 ECTS)

Discussion of several advanced issues of community and evolutionary ecology. Intra- and interspecific competition, commensalism, parasitism and altruistic interactions. Life history strategies. Metapopulations and metacommunities. Null model approaches to ecology.

## BIO 403 Marine Biology (6 ECTS)

The course begins with a brief introduction to the physical, chemical, and geological processes that affect the major features of the ocean: plate tectonics, ocean circulation, tidal cycles and shoreline processes. Understanding the biology of marine organisms: adaptations of animals and plants to a saltwater existence, the different kinds of marine habitats and the diversity, abundance and distribution of organisms associated with them, as well as selected examples of population and community ecology of marine ecosystems and their productivity. In addition, various aspects of applied ecology, which may include commercial fisheries, mariculture, and marine pollution, will be considered. A field trip to a marine ecosystem in Cyprus is organized in order to familiarize with topics discussed in lectures.

## BIO 404 Environmental Pollution (6 ECTS)

The course focuses on the causes of environmental pollution as well as on the methods of monitoring pollution. Topics include: Pollution assessment and analysis, environmental monitoring, chemical processes in the air, water and soils, data and environmental analysis and problem solving, environmental carcinogens.

## BIO 405 Phylogenetics (6 ECTS)

Principles and methods of phylogenetic analysis using morphological and molecular data. Maximum parsimony,
maximum likelihood and Bayesian inference. Analysis of sequence data. Statistical support of clades and trees. Dating of cladogenetic events. Commonly used software.

## BIO 406 Ornithology (6 ECTS)

Systematics, distribution, behaviour and ecology, morphology and physiology of birds. Field trips introduce students to birds in their habitats, migration, communication, reproduction, and to data collection methods including bird ringing, and survey methods such as point counts and line transects.

## BIO 408 Ecophysiology (6 ECTS)

General principles of Ecophysiology. Physiological responses of plants and animals to environmental stress. Addressing ecological questions under a biophysical, biochemical, and molecular perspective. Physiological adaptations of plants and animals in a changing world. Responses to climate change and pollution load. Case studies on Mediterranean species of plants and animals.

## BIO 409 Conservation Biology (6 ECTS)

Threats to biodiversity. Extinctions: past and current rates and their causes. Habitat fragmentation and degradation. Invasive species. Diversity and endemicity hotspots. Protected areas and species. Conservation and management of ecosystems, communities and species. Concepts of stability, equilibrium and resilience. Population viability analysis and GIS methods in conservation biology. Biodiversity values and uses.

## BIO 410 Biodiversity of Cyprus (6 ECTS)

Introduction to the most important elements of the biodiversity of Cyprus. General patterns of endemism and species richness, and their relationships with the palaeogeographical and palaeoecological history of the island. Most important floral and faunal elements with emphasis on endemics and threatened species. Hotspots of diversity and protected sites.

## BIO 411 Behavioural Ecology (6 ECTS)

A review of animal behaviour focusing on proximate and ultimate mechanisms of behaviour, including topics such as animal communication, foraging strategies, migration, social competition, sexual selection, mating systems, cooperation and social behaviour. The course includes field trips, where students work on individual or group projects in animal behaviour. Students analyse data, write up project reports and present their work.

## BIO 413 Biogeography (6 ECTS)

Content, history and development of biogeographical research. Basic principles and major processes governing the spatial distribution of organisms. The divergence of ecological and historical biogeography. Theories and methods in ecological biogeography. The significance of the MacArthur-Wilson paradigm in island biogeography. The importance, interpretation and ramifications of the species-area relationship. Assembly rules in biotic
communities - core and satellite species, species cooccurrence, community nestedness and methods of analysis. Basic principles and methods in historical biogeography. The recent bloom of phylogeography. Conservation biogeography - biogeography as a tool for the protection and conservation of biodiversity.

## BIO 414 Field Course (6 ECTS)

The course provides a few introductory lectures describing common and tractable methods of sampling, recording and studying in the field. Students will then apply such methods during a continuous 2-3-week field trip or repeated short-term visits to sampling sites. They will undertake small-scale projects in ecology, biodiversity, animal behaviour and ornithology. In the lab, students will sort samples, analyse and evaluate data collected and, finally, submit a report of their findings.

## BIO 415 Statistical Methods in Ecology (6 ECTS)

An introduction to the most commonly used statistical methods in ecological research. Examples from real case studies. Calculation of diversity indices, community (dis)similarity, ANOVA and multivariate statistics. Introduction to analysis of survivorship tables, mark-recapture and environmental data. General principles of null model analysis. Widely used software for ecological analysis.

## BIO 423 Molecular Oncology (6 ECTS)

By examining the role of chemical carcinogens and oncogenic viruses, students will gain an understanding of malignant cellular transformation and the onset of cancer. They will also learn how oncogenes and tumor suppressor genes control gene expression, cell cycle, apoptosis and metastasis. Students will understand how chemoprevention through dietary components, synthetic compounds and hormones contribute to reducing the risk of cancer. Finally, the new approaches of targeted cancer therapeutics and personalized medicine will be compared to the established approaches. Students in this course must have good knowledge of Biochemistry and Molecular/Cellular Biology.

## BIO 424 Microscopic Techniques (6 ECTS)

Emphasis is placed on understanding the operation of microscopes(s) (including routine maintenance), interaction of beam and specimen, a variety of specimen preparation techniques, photographic techniques for microscopy and photographic procedures for presentation of data.

## BIO 431 Advanced Topics in Computational and Systems Biology (6 ECTS)

This course will cover more specialized and applied topics of Computational and Systems Biology. Topics include Probabilistic and Optimization methods, Machine Learning approaches (clustering, classification, prediction), Image Analysis methods. Emphasis is placed on applications to specific biological problems, such as Phylogenetic inference and Ancestral state reconstruction, Comparative genomics and phylogenomics, Protein structure prediction
and design, as well as "Omics" approaches to describing biological systems.

## BIO 432 Clinical Bioinformatics (6 ECTS)

Due to recent advancements in High Throughput Genomics technology, we are able to study the function of many genes. We have the ability to compare genes in normal vs. diseased cells in order to understand the molecular mechanisms of the different diseases. In this course students will learn how to programme in R , a powerful statistical programming language, how to use statistical methods to analyse real biomedical data and how to interpret the results.

## BIO 434 Principles of Structural Biology (6 ECTS)

An introduction to the various methods currently in use for determining the three-dimensional structures of biological macromolecules and macromolecular complexes at or near atomic resolution. A general introduction to the methods is provided, followed by summaries of the practical aspects and the range of applications for which each technique is applicable. The structure-function relationship is enforced, through examining specific examples (e.g., DNA-binding, structural and membrane proteins; large macromolecular assemblies). Advanced topics: Protein folding and stability; protein mechanics and design; protein structure prediction; Structural proteomics; Genomes in 3D.

## BIO 442 Internship in Biology ( 6 ECTS)

This course involves laboratory or field research supervised by a faculty member of the Department of Biological Sciences. Students will need to discuss with the heads of research laboratories the possibility of a position in the specific research laboratory. Student assessment is based on a ten-minute public presentation of the lab/field work results in the presence of his/her academic advisor and internship supervisor. Students may sign up for this course upon completion of their second year of studies, but not concurrently with their diploma thesis research.

Prerequisites:1) The student shall not have more than one pending class from all classes of his/her first and second year studies. 2) The Academic Advisor, the faculty member that will supervise the internship ('Supervisor') and the Departmental Committee of Undergraduate Studies must approve the student's application for the course. 3) The Supervisor must also submit to the aforementioned Committee a short description of the proposed research project, which should be different from a possible future project for a diploma thesis that the student may conduct or has already conducted in the same lab. 4) Students can repeat this course as many times as they like but not in the same research lab.

This is an optional course and does not cover any requirements of the undergraduate programme of study.

BIO 444 Student Placement in Other Institutions (6 ECTS)
This course involves work environment experience in institutions other that the University of Cyprus supervised by the appropriate institution personnel. Student assessment will be pass or fail, based on a short description of the work experience submitted to the corresponding academic advisor and placement supervisor. Students may sign up for this course upon completion of their 4th semester of studies, but not concurrently with their diploma thesis research.

Prerequisites:1) The student shall not have more than one pending class from all classes of his/her first and second year of studies. 2) The academic advisor and the placement supervisor must approve the student's application for the project which should include a short description of the proposed project.
This is an optional course and does not cover any requirements of the undergraduate programme of study.

## BIO 461 Experimental Embryology (6 ECTS)

An introduction to basic problems in developmental biology by direct experimentation. Both classical and modern molecular manipulations of developing embryos are performed to study cell specification, differentiation, organ formation, and embryonic induction. Various aspects of pattern formation are analysed, including the establishment of polarity and body axes, making use of frogs, mice, and fish.

## BIO 462 Advanced Topics in Molecular Embryology (6 ECTS)

In-depth exploration of topics in embryology mainly covering primary literature with emphasis on its molecular basis. Seminal papers will be presented and discussed in class and students will be asked to critique and analyse the findings. Lectures will provide the conceptual basis for contemporary research in embryogenesis and organogenesis, while laboratory sessions will provide a hands-on introduction to embryo analysis.

## BIO 472 Virology (6 ECTS)

The course examines aspects of fundamental and applied virology. It covers principles, such as the structure of virions, virus replication and the classification of viruses. A number of lectures focus on particular groups of viruses, where both principles and applications of virology are covered. Furthermore, applications of virology are examined, including viral vaccines and anti-viral drugs. Importantly, much of virology is concerned with characteristics of the proteins and nucleic acids of viruses, and with interactions between these molecules and the proteins and nucleic acids of cells. A fine background in Molecular Biology and Cellular Biology and Microbiology is considered pre-requisite for this course.

## BIO 473 Advanced Topics in Cellular and Molecular Immunology (6 ECTS)

This course covers key aspects of Cell and Molecular Immunology, with a focus on mechanisms of adaptive immunity and how these can be utilized for the development of diagnostics, vaccines and treatments, for various diseases. Topics include a) cell interactions, b) antigen processing and presentation, c) immune responses to viruses (e.g. HIV, SARS-$\mathrm{CoV}-2$ ) and bacteria, d) immunological basis of cancer (vaccines and immunotherapies) and e) autoimmunity (e.g. diabetes).

BIO 474 Hot Topics in Infectious Diseases (6 ECTS)
The course is designed as a detailed survey of some of the most important human microbial and viral pathogens. It investigates these agents in detail and includes the most cutting edge basic research findings, as well as epidemiology, treatment and prevention of infections. The course is organized as a lecture course but interactivity with the students is greatly encouraged. At the end of the course, students make an oral presentation on a relevant topic of their choice.

## BIO 475 Viral Ecology (6 ECTS)

This course explains the ecology of viruses by examining their interactive dynamics with their animal hosts, giving emphasis on the types of transmission cycles that viruses have evolved on principal and alternate hosts. It investigates the concept that viral infections represent areas of overlap in the ecologies of the involved species.

BIO 495, 496, 497, 498, 499 Current Topics in Biology (6 ECTS)
The course focuses on specific areas of Biology, approaching the material through lectures and reading primary literature. Topics in the course will vary between semesters but may include in-depth analysis of specialized areas of biology, advances in methodology, novel applications, etc. Emphasis will be placed on developing skills relevant to careers in biology, such as the ability to analyse, discuss, and present primary sources.

## Courses offered to other Departments

These are introductory courses of general interest, which have been designed to cater to the needs of non-biologists. The overall aim is to introduce students of other departments to the basic concepts of Biology and reveal the importance of modern biological sciences in every aspect of life. Each of these courses is 5 or 6 ECTS.

## BIO 101 Introduction to Modern Biological Sciences (5 ECTS)

We are becoming increasingly aware of the relevance of biology to our lives. There are issues that require us to have an elementary knowledge of basic biological trends in
order to make informed decisions. This course addresses how and why basic biological research is performed, providing a basic knowledge of experimental design. The major goal of this course is to provide students from all fields with basic intellectual tools needed to approach these issues. Topics are drawn from the subject matter of Modern Molecular Biology, Genetics and Virology. A secondary goal of this course is to emphasize historical sequences and intellectual processes involved in the development of biological understanding.

## BIO 003 Introduction to Bioinformatics (5 ECTS)

This course is designed to demonstrate through lectures and laboratory work, how the multidisciplinary field of Bioinformatics has revolutionized modern biological research. Topics include: Biological data and databases, nucleotide sequence analysis, protein sequence and structure analysis, biomolecular sequence comparison methods and applications in deciphering the information encoded in genomic data. Practicals include examples of state-of-the-art methods/tools related to the topics covered in the lectures.

## BIO 004 Life Before Birth (5 ECTS)

An introduction to the still mysterious process of how genes and cells bring about the remarkable transformation of the first-formed cell (the fertilized egg) into a human being. Key concepts in the genetic and cellular aspects of Modern Developmental Biology, with emphasis on human embryos and the usefulness of embryos of other animals for understanding human embryogenesis.

## BIO 005 Renegade Cells (5 ECTS)

Normal cells hold down their cell numbers, by controlling their ability to multiply (divide) and by committing suicide (apoptosis) when necessary, sacrificing themselves for the common good. Normal cells respect their boundaries and obey the signals for growth or death they receive from their neighbours. By comparison, renegade cells, the cells that give rise to cancer, disregard the needs of the community of cells, become "selfish and unsociable," and are only "interested" in their own proliferative advantage. This is a course on the origins and evolution of cancer, designed for the student who has little or no knowledge of biology. Students will learn about the fascinating discoveries of molecular oncology over the past years that have revolutionized our understanding of the origins and the behaviour of cancer, and will understand how this knowledge may lead to targeted therapeutics, tailored or rational drug design and cancer prevention strategies. We will discuss topics of general interest such as: Is there genetic predisposition for cancer? Can diet and other lifestyle habits (smoking, exercise) affect our risk for cancer? Has the incidence of cancer increased in recent years? Does meat contain carcinogens? Does fat or alcohol contribute to cancers? What types of cancer are affected by diet? Are vegetarians at a lower risk for developing cancer?

## BIO 006 Biotechnology in our lives (5 ECTS)

Innovation in the field of Biology affects modern lives through the development of technologies in health-related and other industrial applications. Despite the prevalence of such technologies, societies are often uninformed about the underpinnings and mechanisms underlying such technologies, resulting in unnecessary bias and poor policy making. This is a course aimed at students with a minimal or no biology background who are interested in improving their understanding of applications of biology or biotechnology. In this course students will examine various aspects of the effects of biotechnology in everyday life. The goal is to understand the mechanism behind specific technologies and gain skills required to research, as well as understand novel technologies in the future.

Key technologies which are used in nutrition, health, agriculture, research and other industries will be examined (production of genetically modified crops, vaccines/ pharmaceuticals, etc.). Students will also be introduced to ways of mining reliable information and critical analysis in biology. This course will provide an introduction to the concepts and evaluation of established and emerging technologies and discussion of potential ethical and societal implications.

## BIO 100 Introduction to Human Genetics (5 ECTS)

This course is designed for students with no previous knowledge of biology and biological systems. Students will be introduced to the main concepts and basic principles of human genetics, so that they can understand the genetic basis of inherited diseases in humans. The class lectures will target issues and questions such as the following:

- Does marriage between close relatives favour the birth of children with inherited conditions?
- Is cancer inherited?
-Will human cloning bring back our lost loved ones?
- What is known about Cypriot genetics and the Cypriot genetic heritage?
- How did foreign conquerors influence the Cypriot gene pool?
- Why do people inherit characteristics from ancestors not only seven, but even... 1007 generations back?

These and similar questions are answered during this course, by describing molecular genetic testing methodology and discussing ethical dilemmas. Topics include: molecular basis of inheritance, genetic code, genetic information flow, anatomy of the human genome, recombinant DNA technology, Mendelian inheritance, diseases with autosomal (dominant- recessive) and sexlinked modes of inheritance.

## ACADEMIC PROGRAMME CURRICULUM

| ECTS |  |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1 st YEAR |  | 3rd YEAR |  |
| 1st Semester |  | 5th Semester |  |
| BIO 102 Principles of Biology I | 7 | BIO 302 Molecular Cell Biology | 6 |
| LAN 100 General Advanced English | 5 | BIO 382 Animal Physiology | 6 |
| MAS 001 Mathematics I | 6 | BIO 471 Immunology | 6 |
| PHY 102 Physics for Biologists and Chemists | 6 | BIO 482 Botany | 6 |
| CHE 021 Introductory Chemistry (for Biologists |  | Restricted Elective Course | 6 |
| and Physicists) | 6 | TOTAL | 30 |
| TOTAL 30 | 30 | 6th Semester |  |
| 2nd Semester |  | BIO 61 Introduction to Developmental Biology |  |
| BIO 111 Principles of Biology II | 7 | BIO 371 Microbiology | 6 |
| BIO 490 Search and Management of Bibliographic Sources |  | BIO 401 Evolutionary Biology | 6 |
| LAN 103 English for Biomedical Sciences | 5 | BIO 451 Epigenetics | 6 |
| MAS 002 Mathematics II | 6 | Restricted Elective Course | 6 |
| MAS 030 Introduction in Probability and Statistics | 5 | TOTAL | 30 |
| CHE 031 Organic Chemistry for Students of Biology | 6 | YEAR TOTAL | 60 |
| TOTAL 30 | 30 | 4th YEAR |  |
| YEAR TOTAL 60 | 60 | 7th Semester |  |
| 2nd YEAR |  | BIO 491 Undergraduate Thesis I | 13 |
| 3rd Semester |  | Restricted Elective Course | 6 |
| BIO 221 Biochemistry I | 6 | Free Elective Course Free Elective Course | 5 |
| BIO 230 Introduction to Computational Biology | 6 | TOTAL | 29 |
| BIO 241 Laboratory Methods and Techniques I | 6 | TOTAL | 29 |
| BIO 481 Zoology | 6 | 8th Semester |  |
| CHE 030 Organic Chemistry Lab for Students of Biology | 6 | BIO 492 Undergraduate Thesis II Restricted Elective Course | 14 6 |
| TOTAL | 30 | Restricted Elective Course | 6 |
| 4th Semester |  | Free Elective Course | 5 |
| BIO 201 Genetics | 6 | TOTAL | 31 |
| BIO 202 Molecular Biology | 6 | YEAR TOTAL | 60 |
| BIO 222 Biochemistry II | 6 | GRAND TOTAL | 240 |
| BIO 242 Laboratory Methods and Techniques II | 6 |  |  |
| BIO 301 Ecology | 6 |  |  |
| TOTAL 30 | 30 |  |  |
| YEAR TOTAL 60 | 60 |  |  |

[^2]| ECTS WORKLOAD DISTRIBUTION |  |  |  |
| :---: | :---: | :---: | :---: |
|  | TOTAL ECTS | FROM THE DEPARTMENT OF BIOLOGY | FROM OTHER DEPARTMENTS |
| 1st Semester | 30 | 7 | 23 |
| 2nd Semester | 30 | 8 | 22 |
| 3rd Semester | 30 | 24 | 6 |
| 4th Semester | 30 | 30 | 0 |
| 5th Semester | 29 | 24 | 5 |
| 6th Semester | 31 | 31 | 0 |
| 7th Semester | 29 | 24 | 5 |
| 8th Semester | 31 | 26 | 5 |
| TOTAL | 240 | 174 | 66 |

## FACULTY OF PURE AND APPLIED SCIENCES



## DEPARTMENT OF CHEMISTRY

Chemistry is one of the fundamental natural sciences. Its main areas of interest are the study of transformations of matter through chemical reactions (synthetic chemistry), and the analysis of the chemical structure of matter (analytical chemistry). Chemistry plays a prominent role in many other sciences, such as medicine and the health sciences, the environmental sciences and most branches of engineering. Chemistry is closely interlinked with the other natural sciences, with which it often works cooperatively and is therefore a key science for modern civilization.

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CHAIRPERSON
Eftychia Pinakoulaki
VICE-CHAIRPERSON
Anastasios I. Tasiopoulos
PROFESSORS
Angelos M. Efstathiou
Anastasios D. Keramidas
Panayiotis A. Koutentis
Epameinondas Leontidis
loannis Paschalidis
Costas S. Patrickios
Anastasios I. Tasiopoulos
Charis R.Theocharis
ASSOCIATE PROFESSORS
Nikolaos E. Chronakis
Sophia C. Hayes
Constantina P. Kapnissi-Christodoulou
Athanasios Nicolaides
Eftychia Pinakoulaki
ASSISTANT PROFESSORS
Agapios Agapiou
Savvas Georgiades
LECTURER
Sotirios Christodoulou
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## DEPARTMENT'S OBJECTIVES

The Department aims at producing and promoting scientific knowledge and research in Chemistry, and at providing society with highly trained and skilled graduates. Chemistry graduates will be able to work in the local industry (mainly the chemical industry, plastics, pharmaceuticals, food, beverages, construction materials, detergents, cosmetics, etc.), hi-tech private companies, the public sector and the education sector.

Chemistry is a very broad science with many different branches and a high degree of specialization, which is attained to a large extent through postgraduate studies. Most Chemistry graduates continue in postgraduate programmes, as the need for specialization increases daily.

## UNDERGRADUATE PROGRAMMES OF STUDY

Since the academic year 2017-2018 the Department of Chemistry has been offering a new unified Chemistry programme, while students admitted in previous years have been distributed in three parallel chemistry directions (Biological Chemistry, Food and Environmental Chemistry, Materials Chemistry), leading to equivalent degrees. In addition to the standard basic programme(s) of study, the Department of Chemistry offers a minor degree in Chemistry to students of other Departments of the University of Cyprus.

All programmes are based on ECTS and comprise: (a) Introductory Courses in Chemistry, Physics, Mathematics and Computer Programming (1st and 2nd semester); (b) Basic Courses for the Chemistry degree, such as analytical, inorganic, organic and physical chemistry, and biochemistry (3rd - 6th semester); (c) Courses specific to each of the three directions programme (seventh and eighth semester) for students admitted prior to the academic year 2017-2018, while for students admitted to the new unified Chemistry programme, courses that cover a wide range of modern Chemistry areas are offered in the seventh and eighth semesters. In order to graduate with a B.Sc. in Chemistry, students must acquire a total of 240 ECTS.

At the theoretical level, Chemistry is taught through lectures that are complemented by seminars and problemsolving sessions. Chemistry is by nature an experimental science; therefore, the Department places strong emphasis on Laboratory Courses (eight laboratory courses of 6-7 ECTS each), which are regarded as independent courses, meaning that their grades are not compounded with those of the relevant theoretical courses. In order to complete a Chemistry degree, students must complete three university-wide elective courses ( 15 ECTS in total) from at least two different faculties of the University, as stipulated by the University regulations. In addition, students must acquire 10 ECTS units in foreign language courses.

Students who choose Chemistry direction, are required to complete four university electives from at least three different schools (20 ECTS in total). All courses include a written final examination. However, the final grade of a course is calculated based on the student's performance in the final exams, homework, intermediate examination, scientific literature projects and laboratory reports. There are usually prerequisite courses in a series of related courses (e.g. Inorganic Chemistry I, II and III), where level I must precede level II, etc., and it is not possible to enroll in an advanced level course, without having first performed satisfactorily in the lower level course(s) in the series (see related Table).

All Chemistry programmes cover all the basic Chemistry courses in the first three years of studies. This ensures that all graduates with a B.Sc. in Chemistry will have equal credentials in the job market. The differentiation of the former three directions occurs in the fourth year of studies, in which all courses of each programme are different, providing the students with a significant first level of specialization in three important areas of modern Chemistry. However, it must be emphasized that this level of specialization cannot match that offered by a postgraduate degree. In the fourth year of studies of the new unified Chemistry programme, courses that cover a wide range of modern Chemistry areas are offered.

The Diploma Thesis (10 ECTS) is an important feature of the undergraduate programme. During the fourth year of studies, each student works independently for two semesters under the supervision of a member of the academic staff, studying one of the special experimental projects proposed. During the course of their Diploma work, students learn how to work independently, solve laboratory problems, search, study and analyse scientific literature, give seminars to their fellow students in a clear and comprehensive way, and present the results and conclusions of their Thesis work. Although a Diploma Thesis does not need to include original research work, students usually work on truly original research related to the research interests of their supervisors.

## MINOR (SECONDARY) DEGREE IN CHEMISTRY

The minor degree in Chemistry is offered to those students of other departments of the University of Cyprus, who are interested in pursuing academic studies in Chemistry. Minor degree in Chemistry is designed to operate within the original Chemistry programme.

The minor in Chemistry contains both Mandatory and Elective Courses. Mandatory courses ensure that the students enrolling in this programme will obtain a broad view of modern Chemistry, including all its major fields. Elective courses enable students to focus on the topics of
their preference. The minor degree comprises four different groups of courses:

Group A: 3 Theoretical Courses at level 1. Students must elect 3 of the 5 theoretical Chemistry courses with codes $1 x y$ ( $x, y$ are the numbers $0-9$ ).

Group B: 2 Laboratory Courses. Students must elect 2 laboratory courses, one with code $1 \times 0$ and one with code $2 \times 0$ or $3 \times 0$. The lab codes must correspond to the elected theoretical courses of Group A, to ensure compatibility between the laboratory courses and the theoretical courses.

Group C: 3 Theoretical Courses at level 2 or 3. The students elect 3 additional theoretical courses compatible to those of Group A, with codes $2 x y$ or $3 x y$. Courses are considered compatible when they have the same middle number $x$.

Group D: 2 Electives. Students elect 2-3 additional Chemistry courses, which may be: (a) fourth year elective courses or mandatory courses with codes $4 x y$, after obtaining the permission of the teaching staff. (b) Additional courses from Group A (codes 1xy). (c) Additional laboratory courses from Group B (codes $2 \times 0$ or $3 \times 0$ ). (d) Additional courses from Group C, provided they are compatible with the rest (codes $2 x y$ or $3 x y$ ).

## COURSE DESCRIPTIONS

Abbreviations: (K) Core Course - Mandatory Course, (E) Elective Course

## CHE 110 Classical Methods of Chemical Analysis Lab I (7 ECTS)

Classical Methods of Chemical Analysis Lab is a laboratory course focusing on classical methods of chemical analysis. The main goal of the experiments is to introduce students to analytical chemical work and way of thinking, and to provide skills in the qualitative and quantitative analysis of chemical species in laboratory and real samples. The experiments cover the following analytical methods: a) Wet Chemistry Techniques of Qualitative Analysis, b) Classical Chromato-graphic Techniques (separation of species by paper and thin layer chromatography, and column ion exchange chromatography), c) Gravimetry, d) Volumetry (acid-base, complexometric, argentometric and redox titrations) and e) the Determination of Nitrogen by the Kjeldahl method.

CHE 111 Chemical Equilibrium and Classical Methods of Analysis (6 ECTS)

The course covers the following chapters: Introduction, errors and statistical evaluation of analytical data. Errors in chemical analysis. Application of descriptive and inductive methods of statistics to analytical data. Pre-analytical procedures. Classical and modern methods of dissolution
and separation. Classical methods of analysis. Chemical equilibrium and analytical chemistry, equilibria in aquatic solutions, activity and pH. Simple and complex protolytes, acid/base titrations indicators and buffer solutions, titration curves, species distribution diagrammes, nonaqueous solutions of protolytes. Complex formation and complexometric titrations, redox reactions and redox titrations, solubility of salts.

## CHE 120 General Chemistry Laboratory (7 ECTS)

1. Safety rules, chemistry glassware, measurements, separation of mixtures, determination of density, atomic weight, Avogadro's number, mass relationships in a chemical reaction.
2. Ideal gas law, freezing points of solutions, heat of crystallization, enthalpy and entropy of reactions, kinetics of the decomposition of hydrogen peroxide, kinetics of decoloration of crystal violet, factors affecting reactions (temperature), intermolecular forces, slime gel, bonding.
3. Chemical balance, calculation of the chemical equilibrium constant, solubility constant, qualitative and quantitative analysis, titrations, acid-base, equilibrium of metal complexes-speciation, separation-paper chromatography.
4. Recycling aluminum cans, alum, copper cycle.
5. Spectrochemical analysis, UV-vis, IR, NMR, molecular structure-VESPR, crystal structure.
6. Synthesis of complexes, Co3+-ethylenediamine, separation of isomers, Fe2+/3+-phenanthroline.
7. Electrochemistry, redox reactions-titrations, galvanic cells, electrolysis, solar cells.
8. Reactions of organic molecules, urea, aspirin.
9. Chlorophyll, vitamin C, amino acids, beverage analysis.
10. Atmosphere analysis.

## CHE 121 Introductory Chemistry (6 ECTS)

Atomic Structure: Hydrogen Atom (the Bohr model, the Schrödinger equation, the principal, azimuthal, magnetic and spin quantum numbers, the atomic orbitals), Polyelectronic Atoms (the Pauli exclusion principle, Hund's rule, the building - up principle, electronic configurations).

Periodic table: Blocks, Periods and Groups, Periodicity of Physical Properties, Trends in Chemical Properties.

Chemical Bonds and Molecular Structure: Ionic Bonds, Covalent Bonds, Lewis structure, VSEPR theory, Molecules with multiple bonds, Metallic bond.

Nomenclature: Rules for Writing and Naming Inorganic and Metal-Organic Compounds According to IUPAC
Conventions.

Thermodynamics and Equilibrium: Free Energy, Enthalpy, Entropy, Equilibrium, Stoichiometry, Solutions, Chemical Kinetics, Activation Parameters.

Chemical reactions: Acid - Base Theories, Chemical Reactions, Energy, Basicity - Acidity, Nucleophilicity Electrophilicity, Potential Definition, Redox Reactions.

Applications: Descriptive Chemistry of the Elements, H2SO4, NH3, Industrial Applications, Environment.

## CHE 122 Inorganic Chemistry I (6 ECTS)

Periodic table of the elements, bonds in inorganic compounds, shapes of inorganic compounds, bond polarity, electrical properties of inorganic solids. Crystal structures of metals and simple ionic compounds ( NaCl , CsI, CaF2, CdI2). Basic concepts in crystallography. Thermodynamic properties of inorganic ionic materials. Transition metal elements. Theory of the structure of complexes. Superconductors, The atmosphere and its structure and properties, Energy resources with emphasis on renewables, Systematic chemistry of Groups $1,2,13,14,15,16,17$ and 18.

CHE 130 Organic Chemistry Laboratory I (7 ECTS)
Separation-Purification Methods: Extraction (separation of organic compound mixtures), recrystallisation, distillation, thin layer chromatography (TLC), column chromatography. Isolation of Natural Products: Isolation of eugenol from cloves, isolation of piperine from pepper. SyntheticMechanistic Organic Chemistry: synthesis of piperine. Spectroscopic characterization and comparision with piperine isolated from pepper.

## CHE 131 Organic Chemistry I (6 ECTS)

Fundamental concepts (orbitals, hybridization, electronegativity, types of chemical bonds, resonance, Lewis acidity/basicity). Alkanes and cycloalkanes: nomenclature physical and chemical properties, conformational analysis, 3D-structures, Newman projections. Classes of chemical reactions, reaction mechanisms and energy diagrams. Alkenes: nomenclature, structure, geometric isomerism (E/Z, cis/trans), stability, carbocation formation, preparation of, chemical properties. Alkynes: nomenclature, structure, preparation of, chemical properties. Introduction to organic synthesis and retrosynthetic analysis. Stereochemistry: enantiomers, diastereomers, meso-compounds, racemic mixtures, Fischer projections, R/S nomenclature. Stereochemistry of addition reaction to alkenes. Alkylhalides: structure, preparation of, chemical properties. Nucleophilic substitution (SN2, SN1). Elimination reactions (E1,E2). Spectroscopy (mass IR, NMR, UV). Conjugated dienes. DielsAlder cycloaddition.

## CHE 140 Physical Chemistry Laboratory I (7 ECTS)

Temperature dependence of the viscosity of liquids. Phase diagram, liquification and critical point. Use of molecular dynamics to study the states of matter. Thermochemistry at constant volume and constant pressure. Chemical equilibria of complexes and indicators. Chemical kinetics: a) Study of a chemical reaction, using volumetric determination of the product, b) Study of a hydrolysis reaction, using spectroscopic determination of the reactant and c) Study of a saponification reaction, using conductivity measurements.

## CHE 141 Physical Chemistry I (6 ECTS)

Ideal and real gases. Kinetic theory of gases. Intermolecular forces, elementary theory of the liquid state. Introduction to chemical kinetics. Kinetics and mechanism. Elementary reactions and their orders. Integrated rate laws. Synthetic mechanisms. Internal energy, work and heat. First law of thermodynamics. Thermochemistry. Thermodynamic and microscopic definition of entropy. Second law of thermodynamics, spontaneous processes and thermal cycles. Entropic calculations in physical and chemical processes. Third law of thermodynamics. Combination of the first and second law and free energies.

## CHE 210 Laboratory of Instrumental Chemical Analysis II

 (6 ECTS)In this course, instrumental qualitative and quantitative analysis experiments are performed. These experiments include spectrometric methods (Ultraviolet - Visible Spectrometry, Infrared Spectrometry, Atomic Emission Spectrometry), chromatographic methods (Gas Chromatography, High Performance Liquid Chromatography), and electrochemical methods (potentiometry, conductivity).

## CHE 221 Inorganic Chemistry II (6 ECTS)

Bonding Models in Inorganic Chemistry: Ionic Bond (Lattice Energy, the Predictive power of thermochemical calculations on ionic compounds), Covalent Bond (Valence Bond Theory, Molecular Orbital Theory), Electronegativity.

The structure and Reactivity of Molecules: The Structure of Molecules, Structure and Hybridization, Experimental Determination of Molecular Structure, Some Simple Reactions of Covalently Bonded Molecules.

Chemical Forces: Intermolecular Distances and Atomic Radii, Types of Chemical Forces, Hydrogen Bonding, Effects of Chemical Forces.

Acid - Base Chemistry: Acid - Base Concepts, Measures of Acid - Base Strength, Hard and Soft Acids and Bases.

Chemistry in Aqueous and Non-aqueous Solvents: Water, Non-aqueous Solvents, Molten Salts, Electrode Potentials and Electromotive Forces.

Inorganic Chains, Rings, Cages and Clusters: Chains, Rings, Cages, Boron Cage Compounds, Metal Clusters.

## CHE 230 Organic Chemistry Laboratory II (7 ECTS)

Risk Evaluation: R/S risk and safety codes; COSHH compliance. Unknown Identification: purification; spectroscopic analysis and identification. Laboratory Techniques: azeotropic distillation use of Dean-Stark apparatus, vacuum distillation; vacuum sublimation; short path distillation; microscale; multi-step synthesis; thin layer chromatography (TLC), spectroscopic analysis NMR, IR and UV. Project Synthesis: searching the literature, chemical abstracts; planning and costing a 3 -step synthesis; evaluating and choosing best synthetic route based on cost and safety. Report Writing: journal format; use of word processing and chemical drawing software. Review of the scientific literature on a topic related to Organic Chemistry.

## CHE 231 Organic Chemistry II (6 ECTS)

NMR Spectroscopy, Benzene and Aromaticity, Benzene Chemistry, Alcohols, Thiols, Ethers, Epoxides, Sulfoxides, Carbonyl Chemistry (Aldehydes, Ketones, Carboxylic Acids and their Derivatives), Amines, Arylamines, Phenols, Pericyclic Reactions (Cycloadditions, Electrocyclic Reactions, Sigmatropic Rearrangements).

## CHE 241 Quantum Chemistry (6 ECTS)

- The need for a quantum consideration of matter. The Rutherford Model, Atomic Emission spectrum of Hydrogen, Rydberg formula, Photoelectric effect. The Bohr atomic model. Wave nature of matter, De Broglie wavelength. Heisenberg uncertainty principle. Schrödinger equation.
- Probabilities, expectation values and operators. Postulates of Quantum Mechanics. Quantum particle-in-a-box. Classic harmonic oscillator. Quantum harmonic oscillator. Tunneling effects. Three-dimensional quantum chemical systems. Rigid Rotor. Spherical harmonics, angular momentum, hydrogen atom.
- Complex quantum systems. Helium atom. Electron spin. Pauli exclusion principle, many-electron atoms. Molecules and Born-Oppenheimer approximation. Valence Bond Theory. Molecular Orbital Theory. Bonding and antibonding orbitals, homonuclear and heteronuclear diatomic molecules. Polyatomic molecules, hybridisation states.


## CHE 242 Physical Chemistry II (6 ECTS)

Introduction to chemical thermodynamics. Chemical potential, fugacity and activity of gases, liquids and mixtures. Solutions and mixtures, colligative properties.

Thermodynamic and practical equilibrium constants. Phase equilibria of pure substances. Vapor pressure. Phase transitions. Gibbs's phase rule. Vapor-liquid equilibria, distillation, azeotropic mixtures. Electrolyte solutions, ionic strength. Electrolytic conductance. Galvanic cells, standard electrode potentials and Nernst equation. Electrolysis and transference numbers. Unimolecular reactions. Activated complex theory, dynamic potential surfaces and reaction dynamics. Liquid state reactions. Catalytic and enzymatic reactions.

CHE 311 Instrumental Methods of Chemical Analysis (6 ECTS)

Instrumental Analysis Methods: Classification, Analytical Instrumentation, Characteristics of Methods, Figures of Merit, Signal-to-Noise Ratio, Sources and Elimination Methods of Noise, Signal-to-Noise Enhancement. Atomic Spectroscopy: Atomic Absorption Spectrometry, Atomic Fluorescence Spectrometry, Atomic Emission Spectrometry, Atomic Mass Spectrometry, Atomic X-Ray Spectrometry. Molecular Spectroscopy: Ultraviolet-Visible Molecular Absorption Spectrometry, Molecular Luminescence Spectrometry, Infrared Spectrometry, Raman Spectroscopy, Nuclear Magnetic Resonance Spectroscopy, Molecular Mass Spectrometry. Electroanalytical Methods: Potentiometry, Coulometry, Voltammetry. Separation Methods: Gas Chromatography, High Performance Liquid Chromatography, Capillary Electrophoresis, Capillary Electrochromatography.

## CHE 320 Inorganic Chemistry Laboratory (6 ECTS)

1. Main group chemistry. Synthesis and characterization of chlorotribenzyltin(IV) and tri(propyloxy)borate.
2. Vanadium Chemistry: Oxidation states, complexes, oxo and non oxo vanadium molecules. Synthesis of bis(acetylacetonate)vanadyl(IV) and tris(catecholate vanadium(IV) dis(triethylammonium).
3. Cobalt Chemistry: Synthesis, structure and kinetic stability. Synthesis of tris(ethylenediamino)cobalt(III) chloride, $[(-) \mathrm{Co}($ en $) 3] \mathrm{I} 3 . \mathrm{H} 2 \mathrm{O}$ and $[(+) \mathrm{Co}(\mathrm{en}) 3] \mathrm{I} 3 . \mathrm{H} 2 \mathrm{O}$.
4. Copper Chemistry: Dinuclear metal complexes, bioinorganic chemistry of copper. Synthesis of aqueous copper(II) acetate, cis- and trans-bis(glycinate)(hydrate)-copper(II).
5. Nickel Chemistry: Structure of Nickel complexes, electronic states. Synthesis of bis(hydrate)bis(acetylacetonate)nickel(II), H2Salen and [ $\mathrm{Ni}($ salen) $)$.

- Characterization of the compounds:
a) $1 \mathrm{H}, 13 \mathrm{C}, 119 \mathrm{Sn}, 11 \mathrm{~B}$ NMR spectroscopy $1,3,5$.
b) UV-Vis spectroscopy $2,3,4,5$.
c) IR spectroscopy $2,4,5$.
d) Magnetic Measurements 2, 4, 5 .
e) Cyclic Voltammetry 2,5.
f) Polarimetry 3.
g) Conductivity 3.
h) Melting point 1 .

CHE 321 Inorganic Chemistry III. Bond Theory, Structure and Reactivity of Metal Complexes (6 ECTS)

1. Coordination Chemistry, Bond, Spectroscopy, Magnetism (Bond theories of metal complexes, infrared and visible spectroscopy of metal complexes, magnetic properties of Metal complexes).
2. Structure (Structure and isomerism of metallorganic molecules with coordination number 1-12, enantiomeric complexes, experimental distinction of enantiomers, chelate effect, macrocyclic ligands, selective binding, template synthesis).
3. Reactions, Kinetics and mechanisms (substitution reactions of square planar compounds and octahedral complexes, effect of crystal field stabilization to the kinetics of metal complexes, acid and base catalysis, fluctional complexes, redox reactions, inner-outer sphere mechanisms, electron transfer, mixed valence compounds, light induced catalytic reactions, applications).
4. Descriptive chemistry of transition metal, lanthanides and actinides (periodic table, oxidation states-electrochemistry, chemistry of the various oxidation states of the metal ions, chemistry of the heavier transition metals, bonding and structure of lanthanides and actinides, coordination chemistry, visible spectroscopy and magnetic properties of lanthanides and actinides, transuranium elements).

## CHE 331 Organic Chemistry III (6 ECTS)

Heterocycles: furan, thiophene, pyrrole, pyridine, quinoline, isoquinoline and indole. Organic Free Radical Chemistry: mechanisms; functional group manipulation; C-C bond formation; Alicyclic Chemistry: ring strain; cycloalkanes 3-7) and larger (8-14 membered) rings. Non-Aromatic Heterocycles and Natural Products: small (3 \& 4) and medium ( 5 \& 6-membered) rings, steroids, $\beta$-lactams, carbohydrates; alkaloids, stereoelectronic, kinetic \& thermodynamic control, NGP, phenolic oxidative coupling. B, Si \& Sn: hydroboration, silylenolethers, Shapiro reaction, electrophilic substitution with allylic rearrangement, CrotyIsilanes, Brook, Sila-Pummerer \& Si-Baeyer-Villiger rearrangement, hydrostannylation, Crotylstannanes, Sn-Li exchange. Pd(0/II), Co \& Fe: applications in synthesis; C-C bond formation via transmetallation, cyclisation, carbonyl/alkene insertions. Mixed Mechanism Workshop.

CHE 332 Bioorganic Chemistry (5 ECTS)
Introduction and areas of interest within Bioorganic Chemistry. Correlation of biomolecular 3D structure to
biological function. Stereo-conformations of peptides and proteins and ways to control them. Principles of development and synthesis of biomimetic molecules. Natural cyclopeptides and synthetic macrocyclic molecules as receptors for ions and biologically-relevant molecules. Acyclic synthetic receptors and applications. Combinatorial synthesis on solid phase for production of peptides, DNA oligonucleotides and PNA oligomers. Principles of orthogonal protection of functional groups. Nucleic acids, small molecules for selective and non-selective interaction with nucleic acids, and methods for characterization of interactions. Synthetic molecules interfering with replication and transcription. Optical probes for nucleic acid detection. Nucleic acid microarrays and protein microarrays. RNAs as catalysts (natural and synthetic ribozymes, Diels-Alderases) and applications. Chemical modification of biomolecules with photoaffinity labels and applications. Glycans, roles in signalling pathways and bioorthogonal strategies for their selective labelling on cell surfaces. Native Chemical Ligation (NCL) and other strategies for production of proteins. Protein-protein interactions and roles in cellular signalling pathways, interference with these processes with small molecules and applications. Combinatorial synthesis of small molecules/chemical perturbagens. Target-Oriented Synthesis (TOS), Diversity-Oriented Synthesis (DOS), Biology-Oriented Synthesis (BIOS) and high-throughput screening techniques for new bioactive compound discovery.

## CHE 340 Physical Chemistry Laboratory II (7 ECTS)

Dissociation constants for weak bases, partitioning equilibria, complex stability constants, vapor-point elevation, freezing-point depression. Vapor-liquid equilibria. Study of a ternary liquid mixture. Sobulisation of pollutants in micelles of surface active substances. Surface tension of solutions and mixtures. Electrochemical measurements with galvanic cells and their applications. Transference numbers and electrolysis. Stabilisation of CdS nanoparticles with polyelectrolytes and their optical properties. Atomic spectra with a diffraction spectrograph. Vibration-rotation spectra using IR-spectrometry. Quantum calculations on conjugated systems of $\pi$-electrons using Hyperchem. Oxidation mechanism of ascorbic acid. Enzymatic hydrolysis of esters. Study of fast reaction kinetics using the stopped-flow method. Photochemical kinetics using flash photolysis. Fluorescence energy transfer between dye molecules. Fluorescence studies of dye binding to DNA.

## CHE 341 Physical Chemistry III: Molecular Spectroscopy (6 ECTS)

Electromagnetic radiation and interaction with atoms and molecules. Molecular symmetry and group theory. Quantum mechanical description of the rigid rotor. Rotational spectroscopy of diatomic and polyatomic
molecules. Selection rules. Quantum mechanical description of the harmonic oscillator. Vibrational spectroscopy of diatomic and polyatomic molecules. Vibrational-rotational spectra. Raman spectroscopy. Electronic spectroscopy: Pauli's exclusion principle and Hund's rules. Franck-Condon principle. Fluorescence. Phosphorescence. Introduction to lasers and applications. Nuclear magnetic resonance spectroscopy (NMR).

## CHE 401 Undergraduate Diploma Thesis in Chemistry I

 (5 ECTS)The Diploma Thesis work is mandatory for the Bachelor Degree in Biological Chemistry. In the first part of the diploma thesis work, students work on a given subject under the supervision of a faculty member. Emphasis is placed on scientific literature search and on mastering methods and techniques in the laboratory. At the end of the semester, the student's performance is assessed by the supervisor and is marked as "Satisfactory" or
"Unsatisfactory". In the latter case, the student must register for the course CHE 401 for one additional semester. The final grade for the Diploma Thesis is announced to the students upon completion of the course CHE 402.

## CHE 402 Undergraduate Diploma Thesis in Chemistry II

 (5 ECTS)The course is a continuation of the course CHE 401. In this part, students continue to obtain their experimental data, and discuss and present the data in diagrams, figures and tables. At the end of the course CHE 405, students write a report on their Diploma Thesis work. In addition, students give an oral presentation of their work, before an examination committee, and must successfully answer questions about their work.

## CHE 410 Food and Environmental Chemistry Laboratory

 (5 ECTS)
## Elective Laboratory course - 8th semester

Laboratory experiments focusing on the analysis of food constituents (carbohydrates, lipids, proteins, enzymes, inorganic components, vitamins), on the qualitative and quantitative determination of chemical additives, toxic and dangerous substances in food, on the determination of pollutants in water. Methods: Gas Chromatography, Liquid Chromatography, Mass Spectroscopy, UV-vis spectroscopy, FTIR spectroscopy

## CHE 411 Food Chemistry (5 ECTS)

Introduction. Water: structure and properties, water activity. Carbohydrates: monosaccharides, oligosaccharides, poly-saccharides, non-enzymatic browning (Maillard reaction, caramelization). Amino acids, peptides and proteins: structure and properties of proteins, effects of food processing and storage on proteins, major proteins in milk, meat, cereals. Enzymes: enzyme kinetics,
enzymatic browning, enzyme reactions and their utilization in food industry. Lipids, fats and oils: classification, physical and chemical properties, lipid peroxidation, hydrogenation and interesterification. Vitamins: Fat soluble and water soluble vitamins. Minerals. Flavor and aroma substances. Colors. Desirable food constituents and food additives: preservatives, antioxidants, emulsifiers, stabilizers. Nondesirable food constituents and food contamination. Novel foods.

CHE 412 Environmental Chemistry (5 ECTS)

## Elective course - 8th semester

The course deals with the fate of chemical substances in the environment and the environmental impact of anthropogenic activities. Chapters included are: Geochemical and elemental cycles. Atmospheric phenomena and related chemical reactions. Aquatic systems and water/wastewater management. Soil chemistry and waste deposition in geological formations. Chemistry and toxicity of toxic metals and xenobiotica. Analysis of environmental samples.

## CHE 415 Bioanalytical Chemistry (5 ECTS)

## Elective course-7th semester

The main purpose of this course is to describe the basic principles and the applications of instrumental and molecular methods in the study of biomolecules. Emphasis will be placed on the following topics: a) Biomolecules: amino acids, peptides, proteins, nucleic acids, b) Application of liquid chromatography for bioanalysis: ion exchange, affinity and size exclusion chromatography, c) Methods and applications of gel and capillary electrophoresis in biomolecules, d) Enzyme kinetics, e) Mass spectrometry of biomolecules: MALDI-TOF/MS, ESI/MS, f) Techniques and applications of Uv/Vis, IR and Raman spectroscopy in biomolecules, g) Molecular Recognition: bioassays (antibodies, antigens, immunoassays), biosensors, DNA-arrays, h) Nucleic Acids: amplification (polymerase chain reaction) and sequencing and i) Protein sequencing.

## CHE 418 Methods of Analysis and Quality Control of Food

 (5 ECTS)
## Elective course - 8th semester

Detection and quantification of food components (proteins, lipids, carbohydrates, vitamins, additives, minerals, enzymes, moisture, etc.), with analytical methods. Chromatography. Electrochemical measurements. Electrophoresis. Spectro-metric techniques. Quality and quality control of food. Quality management systems.

## CHE 421 Organometallic Chemistry (5 ECTS)

General Introduction to Organometallic Chemistry: Definition, Historical Background, Basic Principles, Molecular Orbital Theory and the 18 - Electron Rule,

Counting Electrons in Complexes, the Most Important Applications of Organometallic Compounds.

Classification and Reactivity of Organometallic Metal Complexes: Metal Carbonyl Complexes, Carbonyl Hydride Complexes, Nitrosyl Complexes, Dinitrogen Complexes, Metal - Alkyls, Carbenes, Carbynes and Carbides Complexes, Nonaromatic Alkene and Alkyne Complexes, Allyl and Pentadienyl Complexes, Metallocenes, Arene Complexes, Substitution Reactions, Oxidative Addition, Reductive Elimination, Insertion and Elimination.

Catalysis by Organometallic Compounds: Alkene hydrogenation, Tolman Catalytic Loops, Synthesis Gas, Hydroformylation, Monsanto Acetic Acid Process, the Wacker Process, Synthetic Gasoline, Ziegler - Natta Catalysis, Immobilized Homogeneous Catalysts, a Photodehydrogenation Catalyst "Platinum Pop".

CHE 422 Surface and Solid State Chemistry (5 ECTS)
Elective course - 7th semester
Introduction: goal, definition of a surface, definition of porosity. Adsorption. Solid-liquid and liquid-gas interface. Adsorption isotherms. Sorption. Solid-gas interface.

BET theory and its extensions. Characterization and measurement of porosity. Characterization methods for solid surfaces: spectroscopy, photoelectronic spectroscopy, thermogravimetric analysis, adsorption methods, diffraction methods. Basic groups of porous materials and their applications. Ceramics, mesoporous series.

## CHE 423 Bioinorganic Chemistry (5 ECTS)

## Elective course - 7th semester

General Information on Bioinorganic Chemistry: Definition, Historical Background, Basic Principles, Biological Ligands for Metal Ions.

The most Important Biological Functions of Metal lons: Metalloporphyrins and Respiration, Dioxygen Binding, Transport and Utilization, Binding of Dioxygen to Myoglobin, Physiology of Myoglobin and Hemoglobin, Structure and Function of Hemoglobin, Other Biological Dioxygen Carriers, Photosynthesis, Chlorophyll and the Photosynthetic Reaction Center, Water Oxidizing Center, Enzymes, Vitamin B12 and the B12 Coenzymes, Nitrogen Fixation.

The Biochemistry of Iron: Ferredoxins and Rubredoxins, Availability of Iron, Competition for Iron, Selective Binding of Iron, Siderophores, Iron Storage Proteins.

More Functions of Metal Ions in Biological Systems: Trace elements in Biological Systems, Biochemistry of the Nonmetals, Environmental Chemistry of Metal Ions, Toxicity, Medicinal Chemistry, Chelate Therapy, Antibiotics and Related Compounds.

## CHE 431 Biochemistry (6 ECTS)

Introduction. Biochemical evolution. Protein structure and function: primary, secondary, tertiary and quaternary structure, protein folding. DNA and RNA: nucleic acid structure and the flow of genetic information. Myoglobin and hemoglobin. Enzymes: basic concepts and kinetics, the Michaelis-Menten model. Mechanisms of enzymatic catalysis. Regulation of enzymes: allosteric regulation, isoenzymes, covalent regulation, proteolytic activation. Carbohydrates. Lipids and cell membranes. Metabolism: basic concepts and design. Glycolysis and gluconeogenesis. The citric acid cycle. Oxidative phosphorylation.

## CHE 436 Introduction to Medicinal Chemistry (5 ECTS)

Elective course - 8th semester
Introduction to drugs and their biological targets (proteins, enzymes, receptors, nucleic acids, cell membranes, building blocks). Types of intermolecular interactions. Biologically active compound discovery from natural sources and from synthetic compound libraries. Overview of drug development process: Finding a lead, optimizing target interactions and access to target. Pharmacodynamics and pharmacokinetics. Quantitative structure-activity relationships (QSAR). Major classes of drugs: Antibacterial agents and their targets, mechanisms of action. Antiviral agents, principles of antiviral action, structure and life cycle of representative viruses. Anti-cancer agents, causes of cancer, targets for anti-cancer therapies. Cholinergics, anticholinergics, anticholinesterases, receptors in the peripheral nervous system. Drugs acting on the adrenergic nervous system and adrenergic receptors. Opioid analgesics and opioid receptors.

## CHE 437 Introduction to Computational Chemistry (5 ECTS)

Elective course - 7th semester
A general overview of computational methods and their applications in the prediction of physicochemical properties of molecules. The lectures are supplemented by laboratory work, where students are trained to use a quantum chemical software. The course covers force fields, semi-empirical, DFT and ab initio methods, the most common basis sets and qualitative molecular orbital theory. Problems include the use of quantum chemical software for structural optimization, IR spectrum prediction and visualization of eigenvectors, computation of thermochemical properties, 3-D modelling of molecules and visualization of molecular orbitals. An introduction to qualitative theoretical models for relating experimental data, with computed quantities, is also provided.

CHE 438 Supramolecular Chemistry (5 ECTS)
Elective course - 7th semester
Definition and Development of Supramolecular Chemistry. Host-Guest Chemistry. Energetics of Supramolecular

Complexes: Experimental Methods. Templates and Self Assembly. Molecular Devices. Fullerenes and Carbon Nanotubes.

## CHE 440 Chemical Technology Laboratory (5 ECTS)

## Elective Laboratory course - 8th semester

Analysis of continuous industrial distillation process: Theory - Laboratory exercise. Chemical reactors (batch and continuous stirred tank reactors): Theory - Applications Laboratory exercise. Desalination process of water:Theory of reverse osmosis - Laboratory exercise.

## CHE 441 Chemical Technology (5 ECTS)

Mass balances under steady-state and non-steady-state conditions - applications. Energy balances under steadystate and non-steady-state conditions.- Applications of mass and energy balances. Heat transfer under steady-state and non-steady-state conditions - Heat Exchangers. Chemical reactors - Theory/Applications. Fractional distillation Theory/Applications. Process analysis of sulphuric acid production. Process analysis of cement production.

## CHE 443 Polymer Chemistry (5 ECTS)

## Elective course - 8th semester

Introduction, nomenclature and uses. Condensation polymerisation. Free-radical polymerisation. Ionic polymerisation. Photolytic, electrolytic and radiation polymerisations. Polymerisation of cyclic organic compounds. Modification reactions of synthetic polymers. Biological polymers and their chemical reactions. Polymers containing inorganic elements. Relationship between macromolecular structure and properties. Electroactive polymers. Biomedical applications of synthetic polymers.

## CHE 445 Catalysis (5 ECTS)

Elective course - 7th semester
Concepts and terms describing the catalytic phenomenon and the causes of its origin. Concepts and terms related to the texture and structure of supported metal catalysts. Basic concepts related to the chemical adsorption and desorption processes associated with a solid surface Temperature programmed desorption techniques. Preparation and characterisation methods of supported catalysts. Environmental catalysis: Modern depollution technologies (air and water pollution). Mechanisms of heterogeneous catalytic reactions.

## CHE 446 Special Chapters in Spectroscopy (5 ECTS)

Elective course - 8th semester
Raman Spectroscopy: basic theory: origin of Raman spectra, selection rules, depolarisation ratios, symmetry and selection rules, Resonance Raman spectra, calculation of force constants via normal coordinate analysis, band assignments, Experimental setups and considerations.

Special techniques of Raman spectroscopy: high-pressure Raman spectroscopy, Raman microscopy, surfaceenhanced Raman spectroscopy, time-resolved Raman spectroscopy, matrix isolation Raman spectroscopy, 2D correlation Raman spectroscopy, Raman imaging spectrometry, non-linear Raman spectroscopy. Applications of Raman: spectroscopy in various chemical fields, materials, analytical chemistry, biochemistry and medicine, industry, environment.

## Courses offered to other Departments

CHE 021 Introductory Chemistry for Biologists and Physicists (6 ECTS)

1. Chemistry and the other sciences. The scientific method. Material systems, their properties and models. Physical and chemical phenomena.
2. Chemical composition of matter. Atoms, molecules, compounds, mixtures, solutions. Dalton's atomic theory. Internal atomic structure. Chemical terminology, isotopes, ions, atomic mass units. The mole. Introduction to the periodic table of the elements. Ionic and molecular compounds. Nomenclature and properties of ionic compounds.
3. Simple chemical mol-based calculations. Chemical equations and stoichiometry. Limiting reagent, reaction yield.
4. Aqueous solution of ionic and molecular compounds. Water as a solvent. Solution concentration units. Dilution, mixing, titration. Reaction types in aqueous ionic solutions. Metathesis reactions and precipitations. Acids and bases and their reactions. Redox reaction, oxidation number.
5. The road to quantum theory. Bohr model of the H atom. Hydrogen atom, atomic orbitals, polyelectronic atoms, electronic configuration, periodic table, atom size, ionization energy, electron affinity, oxidation state, charge.
6. Chemical Bonds and Molecular Structure. Ionic and covalent bonds, electron coupling, electronegativity, molecular structure, Lewis structures, VSEPR theory, multiple bonds.
7. Thermodynamics. Internal energy, heat and work. First law. Thermochemistry, reaction enthalpies, formation enthalpies. Intermolecular forces. Solids, liquids, gases and phase diagrams. Solutions, solubilities, colligative properties. Chemical equilibrium and the equilibrium constant, applications to reactions in gases and liquids. Acid-base reaction, pH scale. Spontaneous reactions, reversible reactions. Second law, entropy and free energy. Relation between free energy and equilibrium constant of a reaction.
8. Chemical kinetics, reaction rate, order and mechanism. Kinetic equation, Arrhenius equation, activation energy, catalysis and catalysts.

## CHE 022 Introductory Chemistry for Medicine (6 ECTS)

Scientific context of Chemistry, its relation to the Biological Sciences and Medicine. Physical, chemical and biological phenomena. Atomic and molecular structure of matter. Basic chemical nomenclature. Stoichiometry, the concept of the mole, simple chemical calculations in chemical reactions. Chemistry in solution, ionic and covalent compounds, water as a solvent, water in biological systems, types of chemical reactions in solution. Concentration scales in solutions, dilution, titration.

Electronic structure of atoms. Bohr model, electronic configuration and the periodic table of the elements. Periodicity of element properties, simple description of selected elements, elements important in biology and medicine. Chemical bonding. Lewis symbols, ionic and covalent bond, multiple bonds, concepts of hybridization and resonance. Building-up organic molecules from bonding concepts. Electronegativity, bond polarity, molecular polarity, intermolecular forces, h-bonding, hydrophobicity scales, solubility and interactions of molecules in biological systems.

Energy in molecular systems, thermodynamic laws, thermochemistry, enthalpy, entropy and free energy of reactions. Phases of matter, liquids and vapor pressure, osmotic pressure of solutions, osmosis in biology and medicine, chemical equilibrium concepts. Acids and bases, pH scale.

Organic chemistry, the chemistry of carbon. Simple nomenclature, active groups on biological molecules, isomerism and chirality and their applications to drugs. Simple organic chemical reactions of major groups, applications to health sciences. Biological macromolecules, their structural, physicochemical and reactivity properties. Elements of analytical chemistry for the detection and quantification of drugs and molecules of biological significance.

## CHE 030 Organic Chemistry Lab for Biology Students (6 ECTS)

Techniques: Melting point. Boiling point. Simple and fractional distillation. Steam distillation for isolating Eugenol from cloves. Recrystallization of benzoic acid and caffeine. Extraction of salicylic acid from aqueous solution and determination of partition coefficient. Separation of mixture components by extraction. Thin-layer chromatography (TLC) - TLC analysis of analgesic drugs. Reaction mechanisms: Reactivity of alkyl halides under SN1 and SN2 conditions. Synthesis: Synthesis $\alpha, \beta$-unsaturated ketones with crossed aldol condensation. Nitration of methyl benzoate. Photochemical reduction of benzophenone. Synthesis and bioassay of sulfanilamide.

## CHE 031 Organic Chemistry for Biology Students (6 ECTS)

Basic concepts: orbitals, hybridization, electronegativity, types of chemical bonding, classification of reagents, reactive intermediates. Hydrocarbons: alkanes, alkenes, alkynes, cycloalkanes, benzene. Alcohols, ethers, phenols. Nitro compounds, amines, diazonium salts. Aldehydes, ketones, carboxylic acids and their derivatives. Esters of organic and inorganic acids. Hydrogen bonding in organic compounds. Stereochemistry: enantiomers, diastereomers, geometric isomers. Carbohydrates. Amino acids and proteins. Nucleic acids and nucleotides. Lipids. Stereochemistry and mechanisms of enzymatic reactions.

## ANALYTICAL PROGRAMME OF CHEMISTRY

|  | ECTS |
| :---: | :---: |
| 1st YEAR |  |
| 1st Semester |  |
| MAS 018 Introductory Mathematics I | 5 |
| PHY 102 Physics for Chemists | 6 |
| CHE 111 Chemical Equilibrium and Classical Methods of Analysis | 6 |
| CHE 120 General Chemistry Laboratory | 7 |
| CHE 121 Introductory Chemistry | 6 |
| TOTAL | 30 |
| 2nd Semester |  |
| CS 032 Computer Programming for Problem Solving | 6 |
| MAS 020 Introductory Mathematics II | 5 |
| CHE 110 Classical Methods of Analysis Lab | 7 |
| CHE 122 Inorganic Chemistry I | 6 |
| CHE 131 Organic Chemistry I | 6 |
| TOTAL | 30 |
| 2nd YEAR |  |
| 3rd Semester |  |
| CHE 130 Organic Chemistry Laboratory I | 7 |
| CHE 140 Physical Chemistry Laboratory I | 7 |
| CHE 141 Physical Chemistry I | 6 |
| CHE 241 Quantum Chemistry | 6 |
| Foreign Language Course I | 5 |
| TOTAL | 31 |
| 4th Semester |  |
| CHE 221 Inorganic Chemistry II | 6 |
| CHE 231 Organic Chemistry II | 6 |
| CHE 242 Physical Chemistry II | 6 |
| CHE 431 Biochemistry | 6 |
| Foreign Language Course II | 5 |
| TOTAL | 29 |
| 3rd YEAR |  |
| 5th Semester |  |
| CHE 311 Instrumental Methods of Chemical Analysis | 6 |
| CHE 331 Organic Chemistry III | 6 |
| CHE 332 Bioorganic Chemistry | 5 |
| CHE 340 Physical Chemistry Laboratory II | 7 |
| CHE 341 Physical Chemistry III: Molecular Spectroscopy | 6 |
| TOTAL | 30 |
| 6th Semester |  |
| CHE 210 Laboratory of Instrumental of Methods of Chemical Analysis | 6 |
| CHE 230 Organic Chemistry Laboratory II | 7 |
| CHE 320 Inorganic Chemistry Laboratory | 6 |
| CHE 321 Inorganic Chemistry III. Bond Theory, Structure and Reactivity of Metal Complexes | 6 |
| UCY Elective Course II | 5 |
| TOTAL | 30 |

## 4th YEAR <br> 7th Semester

CHE 404 Diploma Thesis in Chemistry I 5
CHE 411 Food Chemistry 5
CHE 441 Chemical Technology 5
Chemistry Elective Course I 5
Chemistry Elective Course II 5
UCY Elective Course II 5
TOTAL 30
8th Semester
CHE 405 Diploma Thesis in Chemistry II 5
CHE 421 Organometallic Chemistry 5
Chemistry Elective Laboratory 5
Chemistry Elective Course III 5
Chemistry Elective Course IV 5
UCY Elective Course III 5
TOTAL 30
GRANDTOTAL 240

Elective Laboratory Classes
CHE 410 Food and Environmental Chemistry Laboratory 5
CHE 440 Chemical Technology Laboratory 5

## Elective Classes - 7th Semester

CHE 415 Bioanalytical Chemistry 5
CHE422 Surface and Solid-State Chemistry 5
CHE 423 Bioinorganic Chemistry 5
CHE 437 Introduction to Computational Chemistry 5
CHE 438 Supramolecular Chemistry 5
CHE 445 Catalysis 5
Elective Classes - 8th Semester
CHE 412 Environmental Chemistry 5
CHE 418 Methods of Analysis and Quality Control of Food 5
CHE 436 Introduction to Medicinal Chemistry 5
CHE 443 Polymer Chemistry 5
CHE 446 Special Chapters in Spectroscopy 5

## FACULTY OF PURE AND APPLIED SCIENCES



## DEPARTMENT OF COMPUTER SCIENCE

Computer Science addresses a variety of issues, including enhancement of the range of problems that can be efficiently solved using computers, as well as the generation, maintenance and optimization of software and hardware systems for designing high performance computers. Computer Science also focuses on questions relevant to reasoning, conversing and planning, modelling of the functioning of the brain, as well as the roles of language and logic in the solution of practical problems.

In the light of this general perspective, the primary objectives of the Department are to:
(a) Participate in international research in Computer Science.
(b) Disseminate, through its teaching and international activities, knowledge relevant to all aspects of Computer Science.
(c) Promote the effective application of Information Technology within local industry and economy.

CHAIRPERSON
Elpida Keravnou-Papaeliou
VICE-CHAIRPERSON
Christos Christodoulou
PROFESSORS
Christos Christodoulou Yiorgos Chrysanthou
Marios D. Dikaiakos
Yannis Dimopoulos
Chryssis Georgiou
Antonis C. Kakas
Marios Mavronicolas
George A. Papadopoulos
Elpida Keravnou-Papailiou
Constantinos S. Pattichis
Anna Philippou
Andreas Pitsillides
ASSOCIATE PROFESSORS
Georgia Kapitsaki
George Pallis
Yiannos Sazeides
Vasos Vassiliou
Demetris Zeinalipour
ASSISTANT PROFESSORS
Elias Athanasopoulos
Andreas Aristidou
Andreas Pieris
Haris Volos

## DEPARTMENT'S OBJECTIVES

The aim of the Department of Computer Science is to prepare graduates to rise to positions of responsibility, as professionals or in academia, who will be responsible for promoting the development and application of new ideas and technologies.

## PROGRAMME OF STUDIES

The undergraduate programme of studies leads to the award of a Bachelor's Degree in Computer Science. The Department's course material is conceptually divided into four main areas of study:
(a) The "Theory" area is concerned with the foundations of Computer Science: theory and models of computation and the design and analysis of algorithms.
(b) The "Computing Systems" area is concerned with hardware and software systems and elaborates on the concepts of parallel and embedded systems.
(c) The "Problem Solving" area aims at developing algorithmic thinking, with emphasis on principles of programming and algorithm design.
(d) The "Applications" area aims at bringing together the knowledge and skills acquired in the other three areas, for the development of useful applications to solve real problems, such as the communication between networked computers.

The programme includes Compulsory Core Courses, Restricted Elective Courses (which are offered by the Department and allow students to specialize in a specific area of Computer Science or acquire knowledge that spans a wider scientific spectrum) and Elective Courses that are offered by other departments. Some of these courses have prerequisites. The Department of Computer Science offers the following specializations:

- Computer Networks
- Fundamentals of Computer Science
- Big Data and Internet Computing
- Artificial Intelligence
- Software Engineering
- Real World Computing
- Digital and Embedded Systems

Each specialization is linked to a number of courses. The aim of the specializations is to give students the possibility and the motivation to focus on a specific area of Computer Science, via the elective courses and an Individual Diploma Project, called Undergraduate Thesis Project. If a student selects at least three elective courses from the courses indicated for each specialization and undertakes an undergraduate thesis project from the same specialization, then the respective specialization will be indicated in his/her transcripts.

## MINOR PROGRAMME OF STUDIES

The minor programme in Computer Science requires the successful completion of eight courses, which must include the courses CS 111, CS 121, CS 131, CS 133, CS 231 and three Core Courses or Restricted Elective Courses from the undergraduate programme of studies.

## MINOR PROGRAMME IN BIOMECHANICS

The minor programme in Biomechanics requires the successful completion of ten courses with at least 60 ECTS as a total. The length of the study is between 8-12 semesters.

## MAIN FIELDS OF ACTIVITY

One of the main objectives of the Department is the development of programmes of direct relevance to Cyprus, in collaboration with local industry and research institutions.

Within this framework, the Department's academic staff focuses on three major areas as follows:

- Artificial Intelligence and its Applications which includes the following topics: Computational Logic; Computational Intelligence; Neuroinformatics; Intelligent Systems and Applications; Knowledge Engineering and Expert Systems; Machine Learning; Knowledge Representation and Reasoning.
- Computer Systems and Applications, which includes the following topics: Computer Architecture; Cloud Computing; Online Social Networks; Computer Graphics; Learning Technologies, Open and Distance Learning; Medical Informatics and Health Telematics; Multimedia Software Engineering; Theory and Practice of Software Engineering; Systems Security and Privacy.
- Parallel and Distributed Processing Systems and Networks, which includes the following topics: Distributed and Parallel Computing and Networks; Distributed, Real-Time and Multimedia Systems; Formal Methods for Specification and Verification of Concurrent Systems; Integrated Service Networks; Internet Technologies and Systems; Mobile and Transactional Computing; Internet of Things; Parallel and Distributed Systems; Parallel Processing and Architectures; Software Engineering for Distributed Information Systems.


## COURSE DESCRIPTIONS

## CS 111 Discrete Structures in Computer Science and Computation (7.5 ECTS)

Foundations: sets and functions. Logic: Propositional Logic: basics of Predicate Logic. Mathematical Reasoning: methods of proof, induction. Counting: basics of counting, pigeonhole principle, permutations and combinations. Relations: properties and applications, equivalence relations, partial orders. Graphs: basic concepts.

## CS 121 Digital Systems (7.5 ECTS)

Principles of design and construction of digital electronic systems and computers. Representation of data with binary sequences. Data storage and processing by electronic digital circuits. Consolidation of theoretical knowledge through practical exercises in the design and construction of digital circuits in the laboratory for Digital Systems Design and Microprocessors.

CS 131 Programming Principles (7.5 ECTS)
Presentation of the software development process and introduction to the basic principles of programming and programme design using the Java language. Global overview of the Java language with emphasis on built-in and abstract data types, control structures, functions, modular programming and recursion.

## CS 133 Object-Oriented Programming (7.5 ECTS)

Development of object-oriented way of thinking and capabilities to apply it to solving complex problems. Problem-solving and programming using object-oriented methodologies. Abstraction and Information Hiding. Libraries and reuse. Object-oriented design. Inheritance. Polymorphism. Interfaces. Inner classes in Java. Exceptions. Input/Output. Threads and Concurrency in Java. Collections. Advanced topics: Annotations, Networking, Serialization.

CS 202 Explorations into Computer Science (3 ECTS) Weekly lecturers/seminars that cover a broad spectrum of Computer Science and its basic areas, starting from its birth and reaching its modern evolutions. Revolutionary ideas for the foundation and development of Computer Science.

## CS 211 Theory of Computation (7.5 ECTS)

Formal methods of computation based on machines, grammars and languages: finite automata vs. regular languages; pushdown automata vs. context-free grammars; Turing machines vs. unrestricted grammars. Models of computation equivalent to Turing machines and Church's Thesis. Computability and Uncomputability. Introduction to Theory of Computational Complexity with emphasis on the Theory of NP-completeness.

## CS 221 Computer Organization (7.5 ECTS)

Introduction to computer organization and architecture. Types of instructions, coding of instructions, Arithmetic and Logic Unit. Basic principles of the organization of the main functional units of a computer system at machine level: Central Processing Unit (CPU), memory, and Input/Output. Interfacing CPU and peripheral units. Programming in assembly language for MIPS R2000/R3000 and Intel Pentium.

## CS 222 Operating Systems (7.5 ECTS)

Introduction, history and evolution of operating systems. General structure, operations and characteristics of an operating system. Concurrency. Process management Scheduling and dispatch. Real and virtual memory
management. I/O management and disk scheduling. File management. Protection, security and reliability.

## CS 231 Data Structures and Algorithms (7.5 ECTS)

Study of data structures for the organization and efficient processing of data. Linear and non-linear data structures. Hashing techniques. Issues of memory management. Sorting Algorithms. Graph Algorithms. Introduction to algorithm design techniques. Analysis of the average and worst-case complexity of algorithms.

## CS 232 Programming Techniques and Tools (7.5 ECTS)

Introduction to C for Programmers: types x86/x64, loops, selections, expressions, arrays, functions, IO, basic program organization. Advanced programming constructs: program anatomy and processes, memory and addresses (pointers, pointers and arrays, strings and examples), structures, unions and enumerations. Examples and applications of memory management with linear and non-linear programming data structures. Advanced Compilation Topics and Tools: preprocessor directives, compiling multiple files with makefiles, static and dynamic linking of object files, error handling, static and dynamic code analysis. Low-level programming: binary operators, binary files and hexdump. Basic commands of the UNIX operating system, redirection and pipes, access control and basic filters.

## CS236 Algorithms and Complexity (7.5 ECTS)

Topics in the design and analysis of efficient algorithms and their complexity. Significant algorithms in Graph Theory, Algebra, Geometry, Number Theory and Combinatorics. General algorithmic techniques (e.g. divide-and-conquer, backtracking, dynamic programming). Randomized, Parameterized and Approximation algorithms. Fast Fourier Transform. Inherent lower bounds on problem complexity

## CS 324 Communications and Networks (7.5 ECTS)

Introductory course in Computer Networks. The goal is the understanding and use of concepts related to fundamental issues in Communication Networks, using the Internet as an example. Deals with Networking layers, such as the application, transport, network, and data link layers. Open systems and internetworking. Networking technologies including wired and wireless Local Area Networks and network topologies. Algorithms, including routing and congestion control. Introduction to quality of service (QoS) and multimedia applications. Laboratory session includes practical exercises with wireshark and simulations.

## CS 325 Parallel Processing (7.5 ECTS)

The entire spectrum of parallel machines as appearing in Flynn's classification: SISD, SIMD, MISD, MIMD. The main approaches for design and operation of multiprocessor systems. Conventional and non-conventional machines (Data-flow and reduction). Parallel programming approaches: (1) Automatic-parallelizing compilers, (2) Extending serial languages with parallelizing constructs, (3) parallel languages for Functional Programming. Special
emphasis on parallel architectures and parallel programming.

## CS 326 System Security (7.5 ECTS)

Introduction to applied cryptography (symmetric, asymmetric, and stream ciphers, cryptographic hash functions, cryptographic protocols) and security models (CIA), discussion of software vulnerabilities (buffer overflows, integer overflows, use-after-free, dangling pointers), demonstration of attack techniques (code injection, code reuse), defenses (non-executable pages, stack canaries, code randomization, CFI, CPI), side channels, mobile security (Android, iOS), web security (cross-site scripting, CSRF, clickjacking, phishing), special topics (botnets, DDoS, spam, security economics), privacy and anonymity (anonymous communication, TOR).

## CS 341 Artificial Intelligence (7.5 ECTS)

Problem solving techniques in Artificial Intelligence. Knowledge Representation Formalisms (logic, associative networks, frames, production rules). Expert Systems Technology. First and Second Generation Architectures for Expert Systems. Knowledge Engineering. Intelligent Agents. Multi-Agent Systems.

CS 342 Databases (7.5 ECTS)
Introduction to Databases. Organization and proper management of large quantities of data for use in applications. Database models such as the entity-relation model, the relational model, the network model and the hierarchical model.

## CS 343 Software Engineering (7.5 ECTS)

Methods, tools, and procedures for the development and maintenance of large-scale software systems. Existing lifecycle models (e.g. waterfall model). Introduction to Agile development. Requirements analysis and specification techniques. Software development methodologies. Unified Modelling Language (UML) and supported static and dynamic diagrams. Code transformation. Practical experience with CASE tools for modeling data and procedures (ArgoUML, StarUML). Prototyping for Web applications (HTML, CSS). Architectural Design patterns (Model View Controller, etc.). Software verification and validation. Unit testing and frameworks (Junit, etc.). CASE tools. Project planning and management.

## CS 344 Internet Technologies (7.5 ECTS)

Topics of Internet and World-Wide Web technologies, with an emphasis on WWW applications and Internet programming. The foundations of WWW applications including hypertext, navigation in hyperspace, hypertext usability, information overload, markup languages and methodologies of WWW application design. System issues related to Internet programming and performance: protocols, servers, WWW interactivity, Internet-based distributed systems.

## CS 412 Logic in Computer Science (7.5 ECTS)

Propositional Logic Syntax, Semantics, Normal Forms, Decision Procedures, Proof Theory, Compactness and Resolution. Predicate Logic: Syntax and Semantics, Proof Theory Soundness and Completeness and Resolution. Logic Programming. Programming Language Semantics and Verification. Linear and Branching Temporal Logics: Syntax, Semantics and Model-checking algorithms.

## CS 414 Basic Principles of Programming Languages (7.5 ECTS)

History of Programming Languages. $\lambda$ - calculus. Functional Programming (The Haskell programming language, Haskell type system, Haskell's Type Inference, Pure vs impure programming languages). Procedural and Object-Oriented Programming (Basic object-oriented programming notions, Mathematical representation of the Java programming language). Distributed programming (Actors programming model, Process Calculi as mathematical models for representing distributed programming).

## CS 420 Computer Architecture (7.5 ECTS)

Introduction to the state-of-the-art uniprocessor, high performance computer architecture. Emphasis on quantitative analysis and cost/performance trade-offs in the design of the basic units of a processor: instruction set, pipelining, memory system and input/output systems. Qualitative analysis of real machines and their performance data.

## CS 421 System Programming (7.5 ECTS)

Main concepts of System Programming, Introductory and Advanced UNIX commands, System utilities and stream editors (awk, sed), Advanced Shell programming with an emphasis on Bash, Low-Level I/O in C, Files and Filesystem, Processes: Environment, Control and Signals, Interprocess Communication (IPC) with an emphasis on Pipes and Named Pipes (FIFO) in C, XSI IPC (Semaphores, Shared Memory and Message Queues) in C, Network IPC (TCP Sockets) and the client/server model in C, Multithreading in C, Performance evaluation (profiling). Issues in system security and system engineering, Systems Programming in Windows (threads, processes, IPC, sockets and Powershell programming), Scripting Languages: Perl, PHP, Python, TCL/TK.

## CS 422 Advanced Networks (7.5 ECTS)

Introduction to Computer Networks and the Internet, Network Layer - IPv6, Routing, Multicast Routing. TCP operation, Congestion Control, Performance Analysis. Multimedia Networking Applications. Realtime services and protocols, Quality of Service, MPLS, Traffic Engineering, QoS Routing, Mobile and Wireless Networks, Issues in Security for Computer Networks. Introduction to advanced research topics (e.g. Internet of things, wireless sensor networks, VANETs, 5G).

CS 423 Network and Information Security (7.5 ECTS)
Introduction to Security Threats and Attacks, Cryptographic Techniques (encryption, cryptanalysis, authentication, confidentiality), identification and authentication (Kerberos, PKI), Internet Application security protocols ((PGP, SSL/TLS), Network security (Firewalls, IDS), Defending against threats on endsystems, Checking of networks and applications for vulnerabilities, Other issues in network and information security (privacy, ethics, legal framework).

## CS 424 Digital Signal Processing (7.5 ECTS)

Discrete signals and systems, sampling of signals, frequency analysis of discrete systems and signals, z-transform, FourierTransform, Discrete Fourier Transform, and Fast Fourier Transform, digital filters, application examples.

## CS 426 Computer Graphics (7.5 ECTS)

Scene construction, scene hierarchies, camera specification, projections of primitives, clipping, visible surface determination, polygon rasterisation (z-buffer), texture mapping, local and global illumination, shadows, ray tracing, radiosity, real-time acceleration techniques.

## CS 427 Mobile Computer Networks (7.5 ECTS)

Wireless environment, Interference and other problems in wireless communications, Architectures and technologies of wireless networks and wireless communication, Wireless MAC protocols, Wireless Local Area Networks (WLAN), Mobility Management Protocols at the Network layer and at higher layers (transport, application), New network technologies (ad-hoc, sensor, vehicular networks), Open research issues and challenges.

## CS 428 Internet of Things: Programming and Applications (7.5 ECTS)

Introduction to the basic concepts of the design, implementation and programming of modern loT systems and applications based on smart mobile devices and sensor networks. The course covers numerous hands on sensor based applications development.

CS 429 Theory and Practice of Compilers (7.5 ECTS)
Fundamental principles of compiler design. Relation of translators to formal languages and automata theory. Lexical, syntactic and semantic analysis, code generation and optimization, etc. Practical exercises using lex and yacc.

## CS 431 Synthesis of Parallel Algorithms (7.5 ECTS)

Introduction to parallel computing. Complexity and efficiency measurements of parallel algorithms. Parallel computing models. Basic techniques for the design of parallel algorithms. Efficient parallel algorithms in Combinatorics, Graph Theory, and Matrix Theory. Complexity analysis of algorithms on the Parallel Random Access Machine (PRAM). Comparison between various models of computation. Advanced topics (fault-tolerance, atomicity, synchronization, computational limitations of PRAM).

## CS 432 Distributed Algorithms (7.5 ECTS)

Formal models of distributed computing: shared memory versus message passing, determinism versus randomization, concepts of synchronism, asynchrony and real-time. Design and analysis of distributed algorithms and impossibility/improbability results for fundamental problems such as mutual exclusion, consensus, synchronization, leader election, construction of minimum spanning trees. Fault tolerance: Byzantine generals, wait-free algorithms, fault degrees. Formal methods for proving correctness of distributed algorithms. Advanced topics. Special emphasis throughout the course on lower and upper bounds on time and memory.

## CS 433 Constraint Programming and Satisfaction (7.5 ECTS)

Definition of constraint satisfaction problems. Constraint representation and complexity. Various forms of consistency. Backtracking and look-ahead techniques. Intelligent backtracking and condition for solution finding without backtracking. Heuristic and local methods for solution searching. Available commercial products. Study of problems from different application domains, their modeling and the complexity of various algorithms solving them.

## CS 434 Logic Programming and Artificial Intelligence (7.5 ECTS)

Basic principles of Logic Programming and implementation using the language Prolog. Relation of Logic Programming to modern considerations regarding Artificial Intelligence. Solving application problems drawn from the fields of Artificial Intelligence and the Semantic Web, making use of Logic Programming and Constraint Logic Programming.
CS 435 Human Computer Interaction (7.5 ECTS)
Analysis of the human as a computer system user (knowledge models, graphical animation, cognitive models). Interactive technologies (input-output devices, window environments, systems for collaborative support, virtual reality). Methodologies for the design of interactive systems.

## CS 441 Advanced Software Engineering (7.5 ECTS)

Contemporary software engineering methodologies, such as agile techniques (e.g. Scrum, extreme programming), as well as programming techniques (e.g. aspect-oriented programming). Special characteristics and some important software engineering frameworks. Distributed Systems. Embedded Systems. Legacy Systems. Service-Oriented Computing. Project Management.

## CS 442 Machine Learning (7.5 ECTS)

Introduction to Pattern Recognition, Multilayered Neural Networks and backpropagation learning algorithm, Recurrent Neural Networks, Reinforcement Learning, Hopfield Networks \& Boltzmann Machines, Radial Basis Functions, Self-Organising Maps. Survey of the developments in artificial intelligence, machine learning, expert systems, cognitive science, robotics and artificial
neural networks, which contributed to the development of the theory of learning systems.

## CS 443 Software Reuse (7.5 ECTS)

Levels of reuse. Component-based development and composition. Best practices for reuse. Evolution of reuse. Software repositories. Search and retrieval. Design patterns. Object-oriented programming standards. Open source software. Open source licensing and legal issues. Organization policies and open-source based development. Outsourcing. Model-Driven Engineering principles. Service-Oriented Computing. Aspect-Oriented Programming.

## CS 444 Computational Intelligent Systems (7.5 ECTS)

Evolutionary Computing. Genetic Algorithms. Artificial Neural Networks. Fuzzy Systems. Artificial Life. Computational Neuroscience/Neuroinformatics; Hodgkin \& Huxley and Integrate-and-Fire neuron models; Neural Coding; Hebbian Learning and Synaptic Plasticity; introduction to cognitive science. Development and Implementation of Computational Intelligence Systems.

## CS 445 Digital Image Processing (7.5 ECTS)

Binary Image Representation. Image Histogram and Point Operations. Discrete Fourier Transform. Linear Image Filtering. Non Linear Image Filtering Pipeling. Image Compression. Image Analysis I. Image Analysis II. Digital Video Processing.

CS 446 Advanced Topics in Databases (7.5 ECTS)
Theoretical approach to logical and physical design of databases. Algorithms for logical and physical design of databases. Primary and secondary indexing techniques. Advanced query processing and query optimization. Query parallelism. Concurrency control and recovery, integrity and security of data. Distributed databases and introductory concepts distributed transaction processing involving multiple and heterogeneous databases. Problems of interfacing a database with software.

## CS 447 Computer Vision (7.5 ECTS)

Basic concepts and methodologies relating to the subject of Computer Vision. Image information, image processing, feature extraction. Image segmentation, clustering, multiple-image processing, case studies.

## CS 448 Data Mining on the Web (7.5 ECTS)

The course refers to the automatic discovery of interesting and useful patterns from the data associated with the usage, content, and the linkage structure of Web resources. It is one of the most popular areas in computing and information systems due to its direct applications in ecommerce, information retrieval/filtering, Web personalization, and recommender systems. The course examines the techniques from data mining to extract useful knowledge from Web data. Detailed overview of the data mining process and techniques, specifically those that are most relevant to Web mining. Map-Reduce framework, Web data clustering, classification, association rules,
recommendation systems, link analysis, social networks and Web advertising.

## CS 449 Professional Practice in Software Engineering (7.5 ECTS)

Students undertake a significant software project in groups (2-6 students). Some of the specific projects come from the industrial sector. Version control systems (SVN and GitHub). Testing. Software system analysis through software metrics. Specialized issues depending on the project nature (e.g. deployment on web servers, GUI tools and frameworks, etc.).

CS 450 Network Virtualisation and Management (7.5 ECTS)
The course aims to cover the latest approaches in network virtualization (e.g. Software Defined Networks, Network Function Virtualisation, Virtual Infrastructure Management, VNF-Virtual Network Functions, NFV Management and orchestration, Network Services) and the cloud (e.g. OpenStack), as well as more traditional techniques of network management (e.g. SNMP).
The course introduces students to the Network Management Fundamentals, explain the different technologies that are used in network management (traditional, e.g. SNMP, and latest virtualised approaches, such as SDN/NFV), and how they relate to each other. The course also examines management reference models, such as Fault, Configuration, Accounting, Performance, and Security (FCAPS), the different building blocks of network management, the protocols used, the organization of data and the management communication aspects.

CS 451 Software Analysis (7.5 ECTS)
Understanding the ELF format of Unix binaries. Loading Unix binaries and inspection of their sections, symbols, and linked dependencies. Mechanics of binary code for symbol resolution at run-time through the GOT and PLT. Use of ptrace(). Pre-loading of binaries. Dynamic and static analysis of binary code. Disassembling binaries using the Capstone framework. Implementation of debuggers and software breakpoints. Binary re-writting. C/C++ instrumentation using LLVM. Applications of software analysis.

## CS 481 Software Engineering for Software as a Service (7.5 ECTS)

Tools and Integrated Development Environments. Use of agile methodologies. Version control systems. Software systems for Software as a Service. Test-driven development (Cucumber). User-centric design. Design patterns, refactoring and deployment. Opens source software management. Pair programming.

## CS 482 Software Validation, Verification and Quality (7.5 ECTS)

Basic concepts and terminology for validation and verification, reviews, inspections, control (parts, system combination, regression, acceptance, coverage criteria), control of specific categories of software systems, analyzing problems and documentation. Basic principles of quality factors and quality characteristics of software,
methodologies, tools, quality procedures, quality standards, models and quality metrics, quality software production process, quality plan, organize quality assurance process.

CS 483 Software Analysis, Modelling and Design (7.5 ECTS)
Fundamental concepts of software modeling (principles, conditions, properties), modeling languages, virtual models, model types. Early analysis (consistency, sufficiency, accuracy, quality). The role of models in the development and the connection with software development methodo-logies. Model-driven engineering.
The role of software architecture in the software development lifecycle (user needs, design, implementation). The architectural design of a software system. Architectural representation.

CS 499 Special Issues in Computer Science (7.5 ECTS)
The course promotes the technology culture in the undergraduate programme of the Computer Science Department. The content of the course is formulated according to the specific topic chosen by the academics and the students.

## CS 500 Industrial Placement (7.5 ECTS)

The Industrial Placement Provides students with employment for a short period of time in a real working environment and on subjects related to the curriculum of the Department of Computer Science.

## Courses offered to other Departments

These courses are offered to students of other departments. The content of such courses is suitably determined, so that students of other disciplines may appreciate the significance of Computer Science, its relationship to other disciplines, and the potential benefits it offers. Each of the courses for other departments carries 5.6 or 7 ECTS. The courses may be offered every semester or in parallel classes, depending on the needs and capabilities.

## CS 001 Introduction to Computer Science (6 ECTS)

Basic understanding of computer science concepts. Introduction to the 'modern' research trends of the computer science field and the various applications of Computer Science. This course aims to help students appreciate the potentials of informatics and especially the web in their working environment. Students will also become aware of internet safety and malicious software and how they can protect themselves from these dangers. Students will become familiar with various tools and software that are considered vital for their academic and professional career. The following topics are covered: Internet safety and malicious software, social networking, introduction to Web 2.0, search engines, social networking, citation management tools.

## CS 002 Introduction to Computer Science (5 ECTS)

Fundamentals of Computer Science, the main historical events which have contributed to its development, and the possibilities it offers. Basic constituent elements of Computer Science, methods for making it valuable to other sciences, and applications. Practical experience with application packages and the UNIX Environment. Basic principles of Programming in a Fourth Generation Language.

## CS 003 Computer Science and Information Systems (6 ECTS)

Basic understanding of computer science concepts. The course introduces students to the 'modern' research trends of the computer science field and the various applications of Computer Science. Students will also become aware of internet safety and malicious software and how they can protect themselves from these dangers. Students become familiar with various tools and software considered vital for their academic and professional career. The course will cover the following topics: Internet safety and malicious software, social networking, introduction to Web 2.0, search engines, introduction to cloud computing, databases, web design, advanced excel (excel statistics and economical formulas), data visualization, social networking.
CS 011 Introduction to Information Society (6 ECTS)
Presentation of the formed framework for Information Society (IST). Basic concepts and Constituent Elements of IST and the wider context for its application. Issues, such as electronic government, telematics, digital business, electronic commerce, telemedicine, etc. Effects of IST on society and economy.

## CS 012 Web Design Technologies (6 ECTS)

Introduction to the Internet and the WWW. Web design and Development Technologies. Web servers and HTTP, HTML, XHTML, CSS, Javascript. User Interface Design Guidelines. Usability evaluation.

## CS 013 History and Philosophy of Computation (6 ECTS)

Foundational motions of computation, complexity, computational machine, algorithm, programming language, knowledge and intelligence. Basic computational models and their corresponding problems. Historical development of computers and their theoretical basis. The scientific and engineering character of computer science. The relation of Computer Science to other disciplines such as Mathematics, Physics, Psychology and Biology. Computing today over the internet and its future development. Artificial intelligence and machines with intelligent behavior. The human brain and mind as computing machines. Automation of logic and argumentation. Natural language as a computing language.

## CS 014 Aristotle, Logic and Ethical Computer Science (7.5 ECTS)

Fundamental concepts of reasoning and logic by Aristotle. Distinguishing between evidence and dialectical reasoning (Aristotle). Linking the two types of reasoning with the needs of IT yesterday and today. From Aristotelian logic to Boolean logic and Digital logic. Dialectical Argumentation by Aristotle to the Present and its Relation to Computational Argumentation in Artificial Intelligence. Aristotle's Collective as a Logic and Computational Framework. Strict reasoning and reasoning of man. Reasoning Automation and Cognitive Computing Arguments. Relation of Aristotle's Logic to Ethical Values and the Ethics of Artificial Intelligence Machines. Practical reasoning and framework for ethical behavior of people and machines.

## CS 031 Introduction to Programming (7 ECTS)

Computers and Binary Systems. Hardware and Software. Programme Development Cycle, Algorithms and Flow Diagrams. Alphabet and Syntax of FORTRAN. Operators. Selection Structures and Loops. Arrays. Functions and Subroutines. Recursion. Formatted Input-output. Files. Dynamic data.

## CS 032 Introduction to Computer Science and Information Systems (6 ECTS)

Introduction to the Principles of Programming, with emphasis on structured programming, abstraction, and the design, implementation, checking and debugging of modular programmes. Mastering the material through laboratory exercises in the C Programming Language.

## CS 033 Introduction to Programming for Electrical and Computer Engineers (5 ECTS)

Basic Principles of Programming, with emphasis on structured programming, abstraction, design, implementation, checking and debugging of modular programmes. Mastering of the material, through laboratory exercises in a traditional Programming Language such as C.

CS 034 Introduction to Programming Principles for Electrical and Computer Engineers (7 ECTS)

Introduction to computers and programming languages. Problem solving and programming, problem specification, algorithms and programs, modular programming, program and data abstraction. Software development process, topdown design, problem decomposition, reuse, trial and debugging. Variables, operators and expressions, constants, library usage. Input/Output operations. Procedures, parameters, calls, value or address referral. Program flow, variables'scope, lifecycle of variables/function calls, program's state. Procedural programming, algorithmic structures, memory. Synthesized and enumerated data types, arrays, structures, pointers. Introduction to dynamic memory allocation.

CS 035 Data Structures and Algorithms for Electrical and Computer Engineers (7 ECTS)

Advanced programming techniques based on the programming language C: Recursion, Structures, Pointers, File and Memory management. Data types and abstract data types. Algorithm complexity analysis: worst-case and average-case analysis. Linear data structures: List, Stack and Queue, using static and dynamic memory allocation methods. Applications of linear data structures. Sorting algorithms: SelectionSort, InsertionSort, MergeSort, QuickSort and BucketSort. Tree data structures: Binary Trees, Binary Search Trees, Balanced Trees, B-trees. Priority Queues and Heaps. Graphs: definitions, data structures, topological sorting algorithms, graph traversal algorithms. Hashing techniques, hash functions and collision resolution techniques.
CS 041 e-Health and Medical Informatics (6 ECTS)
Introduction to the e-health environment and the appropriate operating framework. Legislative regulatory and social background needed for its materialization. The importance of information technology in extracting useful information from vast medical databases. Applications of computer systems used for the movement of medical knowledge, medical information management, appropriate use of the citizen electronic folder to assist patients and to support a medical decision. Reference to the legal framework that regulates the medical practice, in accordance with European and international directives.

## CS 042 eHealth Seminars (2 ECTS)

Familiarization with the information and communication technologies (ICT) and their practical application in medicine and the medical environment. Students will gain knowledge through eHealth practices adopted in real life by the distinguished presenters of the seminars. Study through videos practices in real environments, such as the intensive care unit, laparoscopic operations, robotic assisted operations, telediagnosis, teleconsultation; appreciation of the importance of medical databases. Understanding of what is coming up in future medicine, considering that ICT will continue to grow and offer its services to the medical profession.

## ANALYTICAL PROGRAMME OF COMPUTER SCIENCE

1 st SemesterCS 111 Discrete Structures in Computer Science andComputation7.5CS 131 Programming Principles ..... 7.5
MAS 012 Calculus for Computer Science I ..... 5
LAN 100 General Advanced English ..... 5
Elective Course ..... 5
2nd Semester
CS 121 Digital Systems7.5
CS 133 Object-Oriented Programming ..... 7.5
MAS 013 Calculus for Computer Science II ..... 5
LAN 111 English for Computer Science ..... 5
MAS 029 Elements of Linear Algebra ..... 5
3rd Semester
CS 221 Computer Organization ..... 7.5
CS 231 Data Structures and Algorithms ..... 7.5
CS232 Programming Techniques and Tools ..... 7.5
MAS 055 Introduction to Probability and Statistics ..... 7
4th Semester
CS 202 Explorations into Computer Science ..... 3
CS 211 Theory of Computation ..... 7.5
CS 222 Operating Systems ..... 7.5
CS 236 Algorithms and Complexity ..... 7.5
ECTS ECTS
5th Semester
CS 324 Communications and Networks ..... 7.5
CS 342 Databases ..... 7.5
CS 343 Software Engineering ..... 7.5
Restrictive Elective Course ..... 7.5
6th Semester
CS 325 Parallel Processing ..... 7.5
CS 326 System Security ..... 7.5
CS 341 Artificial Intelligence ..... 7.5
CS 451 Software Analysis ..... 7.5
Restricted Elective Course ..... 7.5
7th Semester
CS 400 Diploma Project I ..... 5
Restricted Elective Course ..... 7.5
Restricted Elective Course ..... 7.5
BPA 4X Entrepreneurship and Innovation ..... 5
Elective Course ..... 5
8th Semester
CS 401 Diploma Project II ..... 10
Restricted Elective Course ..... 7.5
Restricted Elective Course ..... 7.5
Elective Course ..... 5
Elective Course ..... 5

## RESTRICTED ELECTIVE COURSES OF COMPUTER NETWORK SPECIALIZATION

CS 344 Internet Technologies
CS 421 System Programming
CS 422 Advanced Networks
CS 423 Network and Information Security
CS 427 Mobile Computer Networks
CS 428 Internet of Things: Programming and Applications
CS 432 Distributed Algorithms
CS 450 Network Virtualisation and Management

## RESTRICTED ELECTIVE COURSES OF FUNDAMENTALS OF COMPUTER SCIENCE SPECIALIZATION

CS 412 Logic in Computer Science
CS 414 Basic Principles of Programming Languages
CS 431 Synthesis of Parallel Algorithms
CS 432 Distributed Algorithms
CS 433 Constraint Programming and Satisfaction

## RESTRICTED ELECTIVE COURSES OF BIG DATA AND INTERNET COMPUTING SPECIALIZATION

CS 344 Internet Technologies
CS 421 System Programming
CS 446 Advanced Topics in Databases
CS 448 Data Mining on the Web
CS 450 Network Virtualisation and Management
CS 481 Software Engineering for Software as a Service
MAS 458 Statistical Data Analysis

## RESTRICTED ELECTIVE COURSES FOR SPECIALIZATION OF REAL WORLD COMPUTING

## CS 426 Computer Graphics

CS 435 Human Computer Interaction
CS 444 Computational Intelligent Systems
CS 445 Digital Image Processing
CS 447 Computer Vision

## RESTRICTED ELECTIVE COURSES OF ARTIFICIAL INTELLIGENCE SPECIALIZATION

CS 412 Logic in Computer Sciences
CS 433 Constraint Programming and Satisfaction
CS 434 Logic Programming and Artificial Intelligence
CS 442 Computational Learning Systems
CS 444 Computational Intelligence Systems
CS 445 Digital Image Processing
CS 447 Computer Vision
CS 448 Data Mining on the Web

## RESTRICTED ELECTIVE COURSES OF SOFTWARE ENGINEERING SPECIALIZATION

CS 344 Internet Technologies
CS 421 System Programming
CS 435 Human Computer Interaction
CS 441 Advanced Software Engineering
CS 443 Software Reuse
CS 449 Professional Practice in Software Engineering
CS 451 Software Analysis
CS 481 Software Engineering for Software as a Service

## RESTRICTED ELECTIVE COURSES FOR SPECIALIZATION OF DIGITAL AND EMBEDDED SYSTEMS

## CS 420 Computer Architecture

CS 421 System Programming
CS 428 Internet of Things: Programming and Applications
CS 429 Theory and Practice of Compilers
CS 445 Digital Image Processing
CS 451 Software Analysis
CS 481 Software Engineering for Software as a Service


## DEPARTMENT OF MATHEMATICS AND STATISTICS

The famous Platonic inscription "let no one ignorant of geometry enter" has been adopted, directly or indirectly, by all universities in the world and, appropriately, the Department of Mathematics and Statistics was one of the departments with which the University of Cyprus commenced its operation in 1992. The primary aim of the Department is the promotion of the Mathematical Sciences through scientific research and teaching.
The achievement of this aim is inextricably linked with the need to produce well-trained scientists who will contribute to the continuation of the cultural and economic progress of Cyprus. Because of the pivotal role of Mathematics and Statistics in Science, it is necessary to create a department of high calibre.

Important steps in achieving this ambition are the development of links with corresponding institutions abroad and the development of high-level programmes of study.

## CHAIRPERSON

Konstantinos Fokianos
VICE-CHAIRPERSON
Yiorgos-Sokratis Smyrlis
PROFESSORS
Tasos Christofides
Konstantinos Fokianos
Georgios Georgiou
Andreas Karageorghis
Stamatis Koumandos
Georgios Kyriazis
Efstathios Paparoditis
Theofanis Sapatinas
Yiorgos-Sokratis Smyrlis
Nikos Stylianopoulos
Christodoulos Sophocleous
Nikos Tziolas
Alekos Vidras
Christos Xenophontos

## ASSOCIATE PROFESSORS

Anastasia Baxevani
Nelia Charalambous
Cleopatra Christoforou
Emmanouil Milakis
Christos Pallikaros
Evangelia Samiou

## ASSISTANT PROFESSORS

Evis leronymou
Sergios Agapiou
LECTURER
Andreas Anastasiou

## OBJECTIVES

The Department of Mathematics and Statistics offers the following undergraduate degree:

## - Bachelor in Mathematics and Statistics

- Specialization in Applied Mathematics
- Specialization in Pure Mathematics
- Specialization in Probability/Statistics


## PROGRAMME OF STUDY

The curriculum is divided into four levels and six groups. Level 101-199 corresponds mainly to courses of the first year of studies, level 201-299 corresponds mainly to courses of the second year of studies, level 301-399 corresponds mainly to courses of the third year of studies, and finally, level 401-499 corresponds mainly to courses of the fourth year of studies. Level 001-099 courses correspond to service courses (Table 3) and are not open to Mathematics or Statistics majors.

The six groups into which the courses are divided correspond approximately to the following areas of Mathematics: Analysis, Algebra, Geometry, Probability/ Statistics, Numerical Analysis and Applied Mathematics. The second digit of the course number determines the area of Mathematics that the course belongs to. The characteristic digit (2nd digit of the course number) of the six areas is $0 \& 1,2,3,5 \& 6,7$ and 8 , respectively, and they appear in Table A.

## DEGREE REQUIREMENTS

The Degree in Mathematics and Statistics requires 240 ECTS obtained from the following courses:
(1) 17 Compulsory Courses for all students

MAS 101 Calculus I
MAS 102 Calculus II
MAS 121 Linear Algebra I
MAS 122 Linear Algebra II
MAS 131 Basic Mathematics I
MAS 132 Basic Mathematics II
MAS 133 Sets and Algebraic Structures
MAS 191 Mathematics with computers
MAS 201 Multivariate Differential calculus
MAS 202 Multivariate Integral calculus
MAS 203 Ordinary Differential Equations
MAS 261 Probability I
MAS 262 Statistics I
MAS 271 Numerical Analysis I
MAS 301 Real Analysis

MAS 302 Complex variables I
MAS 331 Classical Differential Geometry
(2) Compulsory Course from other Departments

Course CS 031 Introduction to Programming (7 ECTS).

## (3) Free Electives from other Departments

Students are required to take three to five courses from other departments. These courses must belong to at least three different faculties. The Faculty of Pure and Applied Sciences may be one of the faculties (excluding however the courses offered by the Department MAS).

Free electives from the Sports Council and the Language Centre are considered courses of their respective independent faculties. Only one first-level foreign language course may be considered as a free elective, unless the student completes the second-level as well, in which case both levels count.

## (4) Students are required to take two English language courses

## (5) Restricted Elective Courses within the Department (MAS XXX)

Any course which does not carry a characteristic symbol ( see Table A) is a restricted elective course (MAS XXX).

Any Departmental course within or outside a student's specialization may count as a restricted elective course, provided that the student's specialization requirements have been fulfilled. Moreover, the same course may not be used to fulfill multiple requirements of a specialization.

Furthermore, students may substitute restricted elective courses (MASXXX) worth up to 14 ECTS with work placement, diploma project, independent study, postgraduate courses and a choice from a list of courses offered by other Departments, as follows:

## (a) Work Placement

The students can register for the work placement programme during the summer months. The duration of the placement is $1-3$ months, with 1 ECTS earned for each month of work. The ECTS earned from a work placement contribute towards the sum of 240 ECTS required for obtaining the degree.

Students are allowed to do a work placement (1-3 ECTS) only once, in the summer term between either the $2 n d$ and 3rd or the 3rd and 4th year of their studies. It is the students' responsibility to obtain the required remaining credits so that they fulfil the UCY/Department's requirements.

## Internship Programme Codes

MAS 501 Work Placement I (1 ECTS)
MAS 502 Work Placement II (1 ECTS)
MAS 503 Work Placement III (1 ECTS)

## (b) Diploma Project (Two Semesters)

Students can register for a Diploma Project (MAS 510 and MAS 511) in the last two semesters of their studies, substituting restricted elective courses (MASXXX).

## (c) Courses from other Departments

The descriptions of the courses that follow, can be found in the prospectuses of the corresponding Departments.

Department of Business and Public Administration
BPA 444 Social Networks and Business
BPA 446 Business Analysis: Predictive Models
Department of Computer Science
CS 231 Data Structures and Algorithms
CS 236 Algorithms and Complexity
CS 445 Digital Image Processing
Department of Electrical and Computer Engineering
ECE 220 Signal and Systems I
ECE 320 Signal and Systems II
ECE 326 Dynamical Systems and Control
Department of Mechanical and Manufacturing Engineering
MME 216 Fluid Mechanics I
MME 217 Heat Transfer
MME 418 Compressible Flow

## Department of Physics

PHY 225 Quantum Mechanics I
PHY 405 Cosmology and General Theory of Relativity

## (d) Postgraduate Courses

In exceptional cases, students can take maximum two restricted elective courses - postgraduate courses in their last year of studies as long as their GPA is of at least 8.5 Departmental postgraduate courses and upon the lecture's and academic advisor's approval. The ECTS of each course are credited only once.

## (e) Independent Study

Students may register for the course MAS 499 as a restrictive elective course (MAS XXX), during the last two semester of their studies.

## (6) Compulsory Courses according to the areas of specialization

(a) Specialization: Probability/Statistics

Compulsory Courses within the Department
MAS 350 Stochastic Processes
MAS 361 Probability II
MAS 362 Statistics II
MAS 451 Linear Models I
MAS 454 Non-Parametric Statistics
MAS 458 Statistical Data Analysis
MAS 321 Introduction to Algebra or one course from the list MAS (Pure) A or one course from the list MAS (Pure) B.
(b) Specialization: Pure Mathematics

Compulsory Courses from other Departments
PHY 103 Physics for Mathematicians
Compulsory Courses within the Departments
MAS 321 Introduction to Algebra
One Course from the list MAS(Pure)A
One Course from the list MAS(Pure)B
Two Courses from the list MAS(Statistics)
c) Specialization: Applied Mathematics

Compulsory Courses from other Departments
PHY 103 Physics for Mathematicians
Compulsory Courses within the Departments
Two Courses from the list MAS(Applied)A
Two Courses from the list MAS(Applied)B
Two Courses from the list MAS(Statistics)
MAS 321 Introduction to Algebra or
One course from the list MAS(Pure)A or One Course from the list MAS(Pure)B.

## Lists

| MAS(Applied)A = | MAS 303 - Partial Differential Equations, MAS 304 - Functional Analysis, MAS 371Numerical Analysis II |
| :---: | :---: |
| MAS(Applied)B = | MAS 403 - Ordinary Differential |
|  | Equations II, MAS 420 - Approximation |
|  | Theory, MAS 471 - Numerical Solution of |
|  | Ordinary Differential Equations, MAS 472 |
|  | - Numerical Solution of Partial |
|  | Differential Equations, MAS 473 - |
|  | Introduction to the Finite Element |
|  | Method, MAS 481 - Applied |
|  | Mathematical Analysis, MAS 482 - |
|  | Classical Mechanics, MAS 483 - Fluid |
|  | Dynamics |


| $\operatorname{MAS}($ Pure $) \mathrm{A}=$ | MAS 303 - Partial Differential Equations, MAS 304 - Functional Analysis, MAS 401 Measure Theory and Integration, MAS 418 - An Introduction to Fourier Analysis |
| :---: | :---: |
| MAS(Pure) $B=$ | MAS 426 - Field Theory, MAS 431 Introduction to Differentiable Manifolds, MAS432 - Introduction to Riemannian Geometry, MAS433 - Topology |
| $\operatorname{MAS}($ Statistics $)=$ | MAS 350 - Stochastic Processes, MAS 361 Probability II, MAS 362 - Statistics II, MAS 451 - Linear Models I, MAS 454 NonParametric Statistics, MAS 458 Statistical Data Analysis |

## Notes

(a) Choosing a specialization: students choose their specialization during their 2nd year of studies (at the beginning of the spring semester). In order to change specialization, a student needs to apply in writing to the Head of Department before the commencement of the semester during which the student desires the change to take effect.
(b) A student may complete her/his studies with more than 240 credits, depending on her/his choice of elective courses inside and outside the Department.
(c) Indicative programmes of study for the Bachelor in Mathematics and Statistics with specialization in Pure Mathematics, Applied Mathematics and Statistics are given in Tables C1, C2 and C3, respectively.
(d) Reading courses are not offered at the undergraduate level. Students may enroll in an Independent Study instead.
(e) The same course may not be used to fulfill multiple requirements of a specialization.

## MINOR PROGRAMME OF STUDY

The minor programme in Mathematics is open to all University students, except for students from the Department of Mathematics and Statistics.

According to the University regulations, a minor programme consists of courses totaling at least 60 ECTS. The earliest a student can enroll on a minor programme is the third semester of her/his studies. The requirements for the minor in Mathematics are the successful completion of nine courses which must include: MAS 101, MAS 102, MAS 121, MAS 133, MAS 261, MAS 262, MAS 271, and two additional courses worth 7 ECTS or 8 ECTS from courses within the Department of Mathematics and Statistics.

## COURSE DESCRIPTIONS

## MAS 101 Calculus I (8 ECTS)

Fundamental properties of real numbers. Sup and Inf of a set and its basic properties. Sequences, its limits, properties of converging sequences. Subsequences. Nested interval principle. Functions and their limits. Sequential approach to limits of functions. Continuity of functions. Intermediate value Theorem and Existence of Extreme values Theorem. Uniform Convergence. Derivatives, basic results. Mean value Theorem and its variations. Continuity and derivative of Inverse function. Graph of a function. L'Hôpital's Rule.

## MAS 102 Calculus II (8 ECTS)

Required essential knowledge: MAS 101
Partitions, upper and lower sums, Riemann integral on a closed interval. Basic existence theorems of integrals. Computation of volumes and areas. The Fundamental Theorems of Calculus, generalised integrals. Logarithmic and exponential functions. Basic methods of integration, integration by parts, substitution, induction formulas, integration of rational functions. Taylor's formula, computation of Taylor's formula for various basic functions. Approximation of smooth functions by polynomials, the irrationality of e. Series, comparison test, Cauchy's criterion, ratio test, nth root test, integral test, absolutely and conditionally convergentseries, Leibniz's Theorem for alternating series, Abel's and Dirichlet's criteria, products of series.

## MAS 121 Linear Algebra I (8 ECTS)

The algebra of matrices, invertible matrices. Reduced echelon form of a matrix and linear systems of equations. Vector spaces, base, dimension. Linear maps, matrix of a linear map, change of basis matrix, rank of a matrix. Determinants. The set of solutions of a linear system. Eigenvalues, eigenvectors and eigenspaces.

## MAS 122 Linear Algebra II (8 ECTS)

Polynomial Ring. Characteristic polynomial, diagonalization, applications. Cayley-Hamilton theorem, minimal polynomial. Invariant subspaces, generalized eigenspaces. Primary decomposition theorem. Nilpotent endomorphisms, Jordan canonical form. Inner-product spaces, Gram-Schmidt method. Special matrices and their properties.

## MAS 131 Basic Mathematics I (7 ECTS)

Functions and limits. Differentiation. Applications of differentiation, graphs, optimization problems. Integration (indefinite, definite and improper integrals), techniques of integration. Applications of integration (areas of domains in the plane, volumes of solids, arc lengths of curves and
areas of surfaces of revolution). Differential equations. Complex numbers.

## MAS 132 Basic Mathematics II (7 ECTS)

Analytic Geometry in R2: Vectors, inner product, length, distance between points. Equation for a line, tangent, vertical line to a curve. Circles, ellipses, parabolas, hyperbolas. Analytic Geometry in R3: Vectors, algebraic, geometric properties. Inner product, length, distance between points. Equation for a line (parametric-vector, cartesian format), distance of a point to a line. Regions in Euclidean space. Functions: Curves in the plane, regions between curves, curve intersections. Graphs of functions in R3, analytically and implicitly defined. Solids bounded by surfaces and intersections of surfaces. Transformations: Linear transforms, linear independence and geometric interpretation of determinant. Geometric transforms (translation, rotation, reflection, orthogonal transforms). Polar, cylindrical and spherical coordinates and regions defined in these coordinates. Curves: Curve parametrization in R2 and R3. Velocity, acceleration and tangent line. Arc length. Differentiation: Partial derivatives of multivariable functions. Tangent plane and linear approximation. Gradient and directional derivative. Integration: Double integrals over rectangles and general regions of R2.

## MAS 133 Sets and Algebraic Structures (7 ECTS)

Set Theory: Sets, subsets. Set operations, complement, De Morgan's laws, power set. Cartesian product. Relations, equivalence relations (equivalence classes modulo m, projective space, rational numbers). Venn diagrams. Elements of propositional logic (quantifiers, negation, truth diagrams). Functions: Image of a set, inverse image. Inverse function. Composition of functions, graphs. Sets of functions. Countable sets, uncountable sets. Diagonal procedure. Reductio ad absurdum and Mathematical Induction. Well Ordering Principle and Principle of Mathematical Induction. Examples from Number Theory and other areas of mathematics for understanding the procedure for proving a statement using these methods. Number Theory: Divisibility. Greatest common factor and least common multiple. Euclidean algorithm. Fundamental Theorem of Arithmetic. Applications to polynomials. Introduction to Algebraic Structures: Binary operations. Closure of operations. Properties of closed operations. Examples (composition of functions, matrix multiplication, inverse, congruence classes). Subgroups, groups (examples from cyclic groups (complex unit roots), symmetric group). The group ( $\mathrm{Zn},+$ ) as a quotient. Rings, fields and solving first order equations $\mathrm{ax}=\mathrm{b}$.

## MAS 191 Mathematics with computers (8 ECTS)

MATLAB's environment. MATLAB functions. For, while and if loops. Graphics in two and three dimensions.
Programming. Polynomials. Reading from and writing in files. Computer arithmetic and error propagation. Symbolic computing. Special topics and applications (solution of nonlinear algebraic equations and linear systems, eigenvalue problems, numerical integration, ordinary differential equations).

## MAS 201 Multivariable Differential calculus (7 ECTS)

Normed spaces: examples, Rn, equivalent norms, CauchySchwartz inequality. Open and closed sets. Compactness (Heine-Borel, Bolzano- Weierstrass Theorems). Scalar and vector valued functions. Limits and continuity. Partial derivatives. Differentiability Criterion. Multivariable functions: gradient, differential, directional derivative, vector fields, divergence, curl, Laplacian operator. Vector functions of one variable: derivatives, arc length, change of parameter. Differentiation rules, chain rule, etc. Mean value Theorem. Derivatives of integrals with respect to a parameter. Taylor's Theorem. Local extrema, conditional extrema (Lagrange multipliers). Inverse and implicit function Theorems.

## MAS 202 Multivariable Integral calculus (7ECTS)

Integrable functions and sets, properties. Fubini's Theorem. Iterated integrals for continuous functions over a compact set (scalar functions over regions of the type $\mathrm{Q}=\mathrm{I} 1 \times \mathrm{I} 2 \times \mathrm{I} 3$ $\ldots \times \mathrm{In}$ ). Change of variables Theorem for linear and C1invertible transformations. Computation of volumes, Cavalieri's principle, examples such as the sphere, cylinder and cone. Convergence theorems (interchanging limits and integrals). Transform Theorem (without proof), applications. Parametrized surfaces, partition of unity. Surface and line integrals, computing the area of a surface. Differential forms, Stokes'Theorem (Green, Gauss, Stokes), applications.

## MAS 203 Ordinary Differential Equations I (7 ECTS)

Separable ODEs. First order ODEs and integrating factors. Picard-Lindelöf theorem. Second order ODEs with constant coefficients. The method of undetermined coefficients and the method of variation of parameters. Systems of first order ODEs.

## MAS 222 Number Theory (7 ECTS)

Divisibility, Euclidean algorithm, linear Diophantine equations. Prime numbers and the fundamental theorem of arithmetic. Congruences and the Chinese remainder theorem. Fermat's and Wilson's theorems. Arithmetic functions and perfect numbers. Euler's theorem. Quadratic Reciprocity. Pell's equation and continued fractions.

## MAS 261 Probability I (7 ECTS)

Counting methods, combinatorics, probability measure space though $\sigma$-algebras, independence of events, random variables, cumulative distribution function, discrete and continuous random variables, mean value, multivariable distributions, multivariable normal distribution, sums of random variables, distributions of functions of random variables, covariance function, independence of random variables through the cumulative distribution function, moment generating function, characteristic function, introduction to the law of large numbers, introduction to the central limit theorem.

## MAS 262 Statistics I (7 ECTS)

Random samples, statistical experiments, statistics, estimation methods (e.g. method of moments, method of maximum likelihood), properties of estimators (e.g. unbiasedness, sufficiency, completeness), exponential families, Rao-Blackwell theorem, Lehmann-Scheffe theorem, Cramer-Rao variance lower bound, confidence intervals, minimum length confidence intervals, hypotheses testing, properties of tests.

## MAS 271 Numerical Analysis I (7 ECTS)

Sources and propagation of error. Numerical solution of non-linear equations. Numerical solution of linear systems of equations. Polynomial interpolation. Numerical quadrature.

## MAS 301 Real Analysis (8 ECTS)

Metric spaces, Normed spaces. Examples. Open and closed sets, interior and closure of a set. Accumulation points and the derived set. The Bolzano-Weierstrass Theorem. Convergence of sequences in metric spaces. Cauchy sequences. Complete metric spaces. The fixed point theorem. Compact sets in metric spaces. The Heine-Borel Theorem. Compact metric spaces. Continuous functions. Continuous and uniformly continuous functions. Continuity and compactness. Sequences and series of functions. Uniform convergence. Uniform convergence and continuity, uniform convergence and integration, uniform convergence and differentiation. The metric of uniform convergence. Sufficient conditions for uniform convergence of a series of functions.

## MAS 302 Complex variables I (7 ECTS)

Complex numbers, analytic functions, Cauchy-Riemann equations. Harmonic functions. Exponential, trigonometric and logarithmic functions. Integration, Cauchy's theorem, Cauchy's integral formulas and inequalities. Liouville theorem and the fundamental theorem of Algebra. Maximum modulus principle. Taylor and Laurent series,
residues. The argument principle. Conformal mappings and Mobius transformations.

## MAS 303 Partial Differential Equations (7 ECTS)

1st order PDEs, Non-linear 1st order PDEs, Linear PDEs of 2nd order, Elliptic, Parabolic, Hyperbolic PDEs, Separation of variables, Fourier series.

## MAS 304 Functional Analysis (7 ECTS)

Metric and normed linear spaces, examples, series, Schauder bases, bounded linear operators, linear functionals, dual spaces. Inner product spaces, orthogonality, orthonormal sets, Bessel's inequality, Hilbert spaces, projections, orthogonal complements. Riesz Representation Theorem, orthonormal bases. Zorn's Lemma, Hahn-Banach Theorem with applications, the Principal of Uniform Boundedness with applications, the Open Mapping Theorem with applications, the Closed Graph Theorem with applications.

## MAS 321 Introduction to Algebra (7 ECTS)

Groups, permutations and symmetric groups, cyclic groups. Subgroups and the Theorem of Lagrange. Homomorphisms and Quotient groups. Rings, integral domains and fields. Homomorphisms, ideals and quotient rings. Polynomial rings, divisibility in polynomial rings, prime and maximal ideals. Finite fields and field extensions.

## MAS 331 Classical Differential Geometry (7 ECTS)

The Euclidean space Rn: inner product, Cauchy-Schwarz inequality, isometries. Curves in Rn: parametized cuves, length, periodic, closed cuvres. Curves in R2: curvature, Frenet equalities, winding number, isoperimetric inequality, Hopf Theorem. Curves in R3: curvature, torsion, Frenet equalities, Fundamental theorem. Surfaces in R3: regular surfaces, local parametrization, examples. Differentiable maps between surfaces, tangent space, total differential. First fundamental form, orientation, Gauss map, second fundamental form, principal curvatures, curvature lines, normal curvature, Gauss curvature, mean curvature. Integration on surfaces. Ruled, minimal surfaces, surfaces of revolution. Isometric (locally isometric) surfaces, Christoffel symbols, Theorema Egregium (Gauss). Parallel vector fields, geodesics, geodesic curvature. Gauss-Bonnet Theorem.

MAS 350 Stochastic Processes (7 ECTS)
Stochastic process, stationary processes, stopping times. Markov chains, Poisson processes, Brownian motion.

MAS 361 Probability II (7 ECTS)
Review of basic elements from MAS 261. Stochastic independence through $\sigma$-algebras, Borel-Cantelli lemmas,

Kolmogorov 0-1 laws, mean value as Lebesgue integral, basic inequalities, convergence of sequences of random variables, convergence of series of random variables, laws of large numbers, central limit theorems, conditional probability, conditional mean value, introduction to martingales, central limit theorem for martingales.

## MAS 362 Statistics II (7 ECTS)

Asymptotic properties of estimators, asymptotic efficiency, asymptotic normality, introduction to statistical decision theory (minimax estimators, Bayes estimators), asymptotic properties of tests, optimal tests, goodness-of-fit tests, tests of independence. U-statistics.

## MAS 371 Numerical Analysis II (7 ECTS)

Brief revision of the theory of eigenvalues and eigenvectors. Positive definite matrices. Vector and matrix norms. Iterative methods for the solution of linear systems. Gershgorin bounds for eigenvalues. Numerical methods for eigenvalues and eigenvectors. Lagrange interpolation. Hermite interpolation. Divided differences at repeated points. The Newton form of the Hermite interpolation polynomial. Orthogonal polynomials. Gaussian quadrature.

## MAS 401 Measure Theory and Integration (7 ECTS)

General revision: Sets, orderings, cardinality, metric spaces. Measures: Algebras and $\sigma$-algebras, additive and $\sigma$ additive measures, outer measures, Borel measures on the real line. Integration: measurable functions, integration of positive functions, integration of complex valued functions, Convergence Theorems, modes of convergence, product measures, the n -dimensional Lebesgue integral, integration in polar coordinates, signed measures, the Radon - Nikodym theorem, complex measures, differentiation on Euclidean space, functions of bounded variation. Lp Spaces: The basic theory, the dual of Lp , the useful inequalities, the distribution function, weak - Lp spaces, interpolation.

## MAS 402 Complex Analysis II (7 ECTS)

Compactness and convergence in the space of analytic functions. The space of meromorphic functions. Riemann mapping theorem. Weierstrass Theorem on entire functions, analytic continuation. Elliptic funtions. Riemann surfaces.

## MAS 403 Ordinary Differential Equations II (7 ECTS)

Boundary Values Problems. Sturm-Liouville type problems. Asymptotic behaviour of nonlinear systems of ODEs: Stability. Perturbation Theory of systems of ODEs which possess periodic solutions. Perturbations of twodimensional autonomous systems. Poincaré-Bendixson theory.

MAS 418 An Introduction to Fourier Analysis (7 ECTS)
Periodic functions, trigonometric polynomials, trigonometric series. Fourier series. Convergence of Fourier series. Bessel's inequality. Completness, Parseval's Theorem. The Riemann-Lebesgue Lemma. Dirichlet's Theorem. Gibbs phenomenon. Differentiation and Integration of Fourier series. Cesaro and Abel summability of Fourier series. Fejer's Theorem. Poisson's Theorem. The Fourier transform and its properties. The inversion theorem and Plancherel's identity. The convolution and its properties. Applications to partial differential equations.

## MAS 419 Special Topics in Analysis (7 ECTS)

Depends on the special interest of the staff member teaching it.

## MAS 420 Approximation Theory (7 ECTS)

Normed linear spaces and inner product spaces. Bounded linear operators. Fixed Point methods. Iterative methods for linear systems. Best approximation in normed linear spaces and inner product spaces. Orthogonal polynomials.

MAS 422 Introduction to Coding Theory (7 ECTS)
Introduction to finite fields. Vector spaces over finite fields. Linear codes. Encoding and decoding with a linear code. Syndrome decoding. Hamming codes. Cyclic codes.

## MAS 424 - Theory of Rings and Modules (7 ECTS)

Rings and ideals. Homomorphism Theorems. Unique factorisation domains and principal ideal domains. Factor rings. Prime and maximal ideals. R-modules and homomorphisms. Finitely generated R -modules. Noetherian rings.

## MAS 425 Group Theory (7 ECTS)

Normal subgroups, homomorphism theorems. Direct and semidirect products. Group actions. Normalizers and centralizers. Sylow theorems and p-groups. Simple groups Finitely generated Abelian groups. Composition series and Jordan - Hölder theorem. Soluble groups.

## MAS 426 Galois Theory (7 ECTS)

Rings, ideals, polynomial rings. Fields, field extensions, algebraically closed fields, finite fields. Normal extensions and Galois extensions. The fundamental theorem of Galois theory. Solutions of equations by radicals, ruler and compass constructions.

## MAS 427 Group Representation Theory (7 ECTS)

Representations. FG - modules, FG - submodules, FG homomorphisms. Maschke's Theorem and Schur's Lemma. Irreducible modules. The group algebra, the centre of the
group algebra. Characters, relation between characters and representations.

## MAS 429 Topics in Algebra (7 ECTS)

Depends on the special interest of the staff member teaching it.

MAS 431 Introduction to Differentiable Manifolds (7 ECTS)
Differentiable manifolds. Tangent space. Partition of unity. Sards Theorem. Vector fileds, flows. Frobenius theorem. Differential forms. Theorem of Stokes. Theorem of de Rham.

## MAS 432 Introduction to Riemannian Geometry (7ECTS)

Introduction to manifolds, tangent spaces and vector fields Riemannian manifolds. Connections, geodesics, exponential map, normal coordinates, Gauss'Lemma. HopfRinow Theorem. Curvature. Jacobi fields. Theorems of Bonnet-Myers, Synge-Weinstein and Hadamard-Cartan.

## MAS 433 Topology (7 ECTS)

Topological spaces, continuous functions, connected and compact sets, product spaces, the Tychonoff theorem, separation axioms, metric spaces. Homotopy, the fundamental group, the Seifert Van Kampen Theorem, Covering spaces.

## MAS 434 Introduction to Algebraic Topology (7 ECTS)

Homology, Cohomology. CW complexes. Homology and Cohomology of product spaces, the Eilenberg Zielber theorem and the Kunneth formula. The cohomology ring. Cup product. Poincare duality. Applications: Homology and cohomology of compact surfaces, the Jordan Brouwer separation theorem, invariance of domain.

## MAS 439 Special Topics in Geometry (7 ECTS)

Depends on the special interests of the staff member teaching it.

## MAS 451 Linear Models I (8 ECTS)

Simple linear regression model: estimation, confidence intervals, hypothesis testing. Multiple linear regression model: estimation, confidence intervals, hypothesis testing. Goodness of fit, residual analysis and model selection. One and two-way ANOVA.

## MAS 452 Linear Models II (7 ECTS)

Analysis of variance with one or more fixed-effects, Analysis of variance with one or more random factors, analysis of covariance. Generalized linear models: estimation in some examples, logistic regression, asymptotic properties of estimators.

## MAS 454 Non-Parametric Statistics (7 ECTS)

Distribution function estimation, probability density function estimation, regression function estimation, applications in $R$.

## MAS 455 Sampling Theory (7 ECTS)

Sampling scheme design. Simple random sampling, stratified, systematic, cluster sampling, multistage sampling. Mean and variance estimation, ratio estimators, linear regression estimators, optimal choice of sample size, bias in survey methodology.

## MAS 456 Time Series (7 ECTS)

Stationary processes, autocovariance function, spectral density, linear processes, ARMA processes, non-linear processes, ARCH and GARCH processes. Estimation of the mean and of the autocovariance function. Moment estimators, least squares estimators and maximum likelihood estimators of parameters. Asymptotic properties.

## MAS 458 Statistical Data Analysis (7 ECTS)

Introduction to R, diagnostic statistics, simulation methods, Markov chain Monte-Carlo, simulation, optimization, resampling.

## MAS 459 Multivariable Analysis (7 ECTS)

Multivariable distributions. Mean vector and covariance matrix estimation. Wishart distribution. Principal components, canonical correlation, cluster and discriminant analysis. Testing hypothesis in many dimensions.

## MAS 466 Survival Analysis (7 ECTS)

Censored data, Truncated data. Survival function and hazard function. Nonparametric estimation of the survival function and the hazard function. Parametric models for the hazard function. Counting processes and martingales. Semiparametric Cox model. Tests for one or more populations, tests of class-K.

## MAS 468 Topics in Probability and Statistics I (7 ECTS)

Topics from combinatorial theory, topics from sampling theory, topics from data analysis, classical problems from probability with applications to computer science, topics from design of experiments, Chi-square tests.

## MAS 469 Topics in Probability and Statistics II (7ECTS)

Stochastic processes/ fields, sample path properties, the notions of stationarity and ergodicity, covariance functions, variograms, spectra, predictions method, kriging.

## MAS 471 Numerical Solution of Ordinary Differential Equations (7 ECTS

Brief revision of initial and boundary value problems for ordinary differential equations. Stability of initial and boundary value problems for difference equations. Onestep methods for initial value problems. Runge-Kutta methods. Multistep methods for initial value problems. Shooting methods and finite difference for boundary value problems.

## MAS 472 Numerical Solution of Partial Differential Equations (7 ECTS)

Brief revision of initial/boundary and boundary value problems for partial differential equations. Onedimensional parabolic equations. Explicit method, implicit method and Crank-Nicolson method. Stability analysis. Two-dimensional parabolic equations. Hyperbolic equations. CFL condition. The Wendroff, Lax-Wendroff and leap frog methods. Explicit and implicit methods for the one dimensional wave equation. Elliptic equations. The five-point and nine-point methods for the Poisson equation. Non-rectangular regions. Robin boundary conditions.

## MAS 473 Introduction to the Finite Element Method (7 ECTS)

Variational formulation of elliptic problems. Methods of Galerkin and Ritz. Basis functions and discretization. Error bounds. Applications and examples. Finite elements for parabolic equations.

MAS 481 Applied Mathematical Analysis (7 ECTS)
Calculus of variations. Laplace transforms. Fourier analysis. Special functions. Integral equations.

## MAS 482 Classical Mechanics (7 ECTS)

Newton's laws. Central forces. Moving coordinate systems. Systems of particles. Plane motion of rigid bodies. Space motion of rigid bodies. Lagrange's equations.

## MAS 483 Fluid Dynamics (7 ECTS)

Introduction to vector and tensor calculus. Continuity and momentum equations in various coordinate systems. Laminar incompressible flows amenable to analytical solution. Steady-state and transient flows and applications. Streamfunction and Stokes flow. Boundary layer. NonNewtonian flows.

## MAS 484 Introduction to Mathematical Modeling (7 ECTS)

This course emphasizes the role of mathematical modelling as a tool for learning and appreciating mathematical techniques. Applications are drawn from diverse areas such as discrete dynamical systems, graphs and networks, linear
programming. Extensive use of computer software is made throughout the course.

MAS 487 Topics from Applied Mathematics (7 ECTS)
Dimensional analysis and normalization, Perturbation methods, Waves and continua.

## MAS 499 Independent Study (7 ECTS)

Study of a research topic with sufficient elements of initiative, self-study and originality under the guidance of a member of the academic staff.

MAS 501, MAS 502, MAS 503 Internship programme I, II, III (1 ECTS)

The responsibilities will be assigned by the hosting institution under the supervision of the academic supervisor.

## MAS 510 Diploma Project I (7 ECTS)

Study of a research topic with sufficient elements of initiative, self-study and originality under the guidance of a member of the academic staff.

## MAS 511 Diploma Project II (7 ECTS)

Study of a research topic with sufficient elements of initiative, self-study and originality under the guidance of a member of the academic staff.

## MAS 512 Summer Research Project (0 ECTS)

Upon completion of the 2nd year of study, students may enroll in an undergraduate research project.

MAS 857, MAS 858 Mathematical Problem Solving Techniques (4 ECTS)

This course is geared towards undergraduate students who are interested in solving mathematical problems. It prepares students who wish to participate in mathematical Olympiads. Emphasis will be given to problem solving techniques, creative thinking and exposition skills.

## Courses offered to other Departments

MAS 001 Mathematics I (6 ECTS)
Introduction: Real numbers - Inequalities - Absolute value - Equation of a straight line, circle and parabola, Functions: Kinds of functions - Graph of a function - Inverse function - inverse trigonometric functions - Exponential and Logarithmic functions, Limit and Continuity:Limit of a function - Continuity of a function - Intermediate-Value Theorem -Limits and Continuity trigonometric, Exponential and Logarithmic functions, The Derivative: The derivative function - techniques of differentiation - Implicit differentiation- differentiation of inverse function -
parametric equations, Applications of the
Derivative:Increasing and decreasing functions - Relative extrema - Absolute extrema - Graphing of a function Newton's method - Rolle's theorem - Mean value theorem, Integration: The indefinite integral - the definite integral the fundamental theorem of calculus - Average value of a function, Principles of integral evaluation: Integration by parts - integration by substitution - integration of rational functions by partial fractions.

## MAS 002 Mathematics II (6 ECTS)

Applications of integrals: Area between two curves volumes by slicing- volumes by cylindrical shells- length of a plane curve - area of surface revolution, Improper integrals: L'Hopital rules, Sequencies, Infinite series: Convergence tests - alternating series, Power series: Maclaurin and Taylor series - convergence - differentiation and integration of power series, Differential equations: First order differential equations - Second order linear differential equations, Linear Algebra: Systems of linear systems - Matrices -Determinants - Vectors - Vector spaces - Eigenvalues and eigenfunctions.

## MAS 003 Complex Analysis for Physicists (7,5 ECTS)

Complex Numbers, analytic (holomorphic) functions and Cauchy-Riemann equations. Harmonic functions. Exponential, logarithmic and trigonometric functions Integrals, Cauchy Theorem. Cauchy integral formula. Morera and Liouville's Theorems. Maximum principle. Fundamental Theorem of Algebra. Taylor and Laurent series. Residue calculus Conformal mappings and Mobius transformations. Applications to problems from the filed of Physics and Engineering.

## MAS 007 History of Mathematics (5 ECTS)

The understanding of infinite and the destiny of Cantor. Foundations: Lost and Found. Prime Number Theorem and Riemann Hypothesis. Roots of equations: The search for a non-existent formula. Archimedes, Newton and Gauss. The mathematics of ancient Greeks. The non-existent "Nobel Prize in Mathematics" and other prizes. Recent sensational developments.

## MAS 012 Calculus for Computer Scientists I (5 ECTS)

Introductory notions. Functions. Limits and Continuity. Derivatives and applications. Integrals. Indefinite and definite integrals. Fundamental theorems of Calculus. Integration techniques.

## MAS 013 Calculus for Computer Scientists II (5 ECTS)

Power series, Taylor and Maclaurin Series, Analytic functions, Indefinite and definite integrals, Geometric
applications, Area, Volume Length of a curve, Improper integrals.

MAS 018 Introductory Mathematics I (5 ECTS) Introduction: Real numbers - Inequalities - Absolute value - Equation of a straight line, circle and parabola, Functions: Kinds of functions - Graph of a function - Inverse function - inverse trigonometric functions - Exponential and Logarithmic functions, Limit and Continuity: Limit of a function - Continuity of a function - Intermediate-Value Theorem - Limits and Continuity trigonometric, Exponential and Logarithmic functions, The Derivative: The derivative function - techniques of differentiation - Implicit differentiation- differentiation of inverse function parametric equations, Applications of the Derivative: Increasing and decreasing functions - Relative extrema Absolute extrema - Graphing of a function - Newton's method - Rolle's theorem - Mean value theorem, Integration: The indefinite integral - the definite integral the fundamental theorem of calculus - Average value of a function, Principles of integral evaluation: Integration by parts - integration by substitution - integration of rational functions by partial fractions, Applications of integrals, Area between two curves - volumes by slicing- volumes by cylindrical shells - length of a plane curve - area of surface revolution, Improper integrals, L'Hopital rules, Sequencies, Infinite series: Convergence tests - alternating series, Power series: Maclaurin and Taylor series - convergence differentiation and integration of power series.

## MAS 019 Introductory Mathematics II (5 ECTS)

VECTORS: Rectangular coordinates in 3-space - Vectors Dot product - Cross product - parametric equations of a line - planes in 3-space-Cylindrical and spherical coordinates, VECTOR-VALUED FUNCTIONS: Calculus of vector-valued functions - change of parameter - Arc length - Unit tangent and normal vectors - Curvature Motion along a curve, FUNCTIONS OF TWO VARIABLES: Limits and continuity - partial derivatives - Differentiability - the chain rule - Directional derivative - Tangent planes Maxima and minima of functions of two variables Lagrange multipliers, LINEAR ALGEBRA: Systems of linear systems - Matrices -Determinants - Vectors - Vector spaces - Inner product spaces - Eigenvalues and eigenfunctions Linear transformations.

MAS 020 Introductory Mathematics II (Chemistry) (5 ECTS)
Differential equations of first order - Linear differential equations of second order - Special forms of differential equations - Complex numbers and their properties - Polar and exponential forms - Applications of complex numbers - Relations between trigonometric and hyperbolic functions - Functions of two variables - Limits and continuity - Partial derivatives - Maxima and minimum -

Double integrals - Introduction to Linear Algebra - Systems of linear equations - Matrices - Determinants - Vectors Vector spaces - Eigenvalues and Eigenvectors

## MAS 025 Mathematics for Engineers I (5 ECTS)

The real number system. Complex numbers (definition, elementary operations). Sequences of real numbers and limits. Real functions of one variable, limits, continuity. Hyperbolic, trigonometric functions. Derivatives of functions of one variable, tangent to a curve. Applications of derivatives. Mean value theorem, monotonicity, extrema, asymptotes. L'Hôpital's rule. Riemannian integral Fundemental Theorem of Calculus. Indefinite integrals. Integration techniques (substitution, integration by parts, partial fractions, trigonometric substitution, etc). Applications of integrals, calculation of area, volume and length of a curve. Real number series. Convergence criteria. Power series. Series and Taylor's thereom.

MAS 026 Mathematics for Engineers II (5 ECTS)
Functions of many variables. Partial derivatives. Gradient, divergence, and curl. Curves. Double and triple integrals. Change of variables. Jacobians. Polar, cylindrical, and spherical coordinates. Line and surface integrals. Green, Stokes, and Gauss theorems. Applications.

## MAS 027 Mathematics for Engineers III (5 ECTS)

Ordinary differential equations. Separable equations. Exact equations. Integrating factors. Solutions of linear and nonlinear first order differential equations. Second order differential equations. Fundamental solutions of homogeneous equations. The inhomogeneous problem. The methods of undetermined coefficients and variation of parameters. Solutions using power series. Applications of ordinary differential equations. Systems of linear differential equations. Laplace transform.

## MAS 028 Mathematics for CEE (5 ECTS)

Introduction to Differential equations: Basic definitions. First order differential equations (Separable, homogeneous, linear, exact equations). Second order linear differential equations (Homogeneous equations with constant coefficients, non-homogeneous: method of undetermined coefficients, Euler equation). Calculus: Vector-valued functions (Calculus of vector-valued functions, arc length, unit tangent and normal vectors). Functions of two variables (Partial derivatives, chain rule, directional derivative and gradients, maxima and minima of functions of two variables). Multiple integrals (Double integrals, double integrals over nonrectangular regions, double integrals in polar coordinates, triple integrals). Line and surface integrals.

## MAS 029 Elements of Linear Algebra (5 ECTS)

Linear spaces, linear interdependency, base, dimension, inner product spaces. Linear systems of equations, matrices, determinants, eigenvalues, eigenvectors. GramSchmidt normalisation. Introduction to Analytic Geometry.

MAS 030 Introduction to Probability and Statistics (5 ECTS)
Descriptive statistics, measures of central tendency and variation, probability, exponential families of distributions, point estimation, sufficiency, completeness, confidence intervals for the mean, for the variance, for the difference of two means, for the ratio of variances, hypothesis testing, null hypothesis, alternative hypothesis, type I and type II error, tests for the mean with large or small samples, tests for comparing means and variances, linear regression, analysis of variance.

## MAS 051 Statistical Methods (5 ECTS)

Descriptive statistics, probability, binomial distribution, normal distribution, sampling, confidence intervals, hypothesis testing, correlation, regression analysis, introduction to analysis of variance.

## MAS 055 Introduction to Probability and Statistics ( 7 ECTS)

Probability, conditional probability, Bayes Theorem, classical problems in probability (balls and bins, the birthday problem). Random variables, distributions (discrete and continuous). Independence. Expected value, applications (coupon collector's problem). Probability inequalities (Jensen's inequality, Markov's inequality, Chebyshev's inequality, Chernoff's bounds). Introduction to stochastic processes, Markov chains, applications, random walks, Poisson process. Statistics, point estimation, confidence intervals, hypothesis testing, applications. Correlation, linear regression.

Note: The use of a statistical package or a statistical programming language (e.g. $R$ ) is an integral part of the course. Students are required to familiarize themselves with the basic concepts of the course via a series of laboratory projects and applications.

## MAS 061 Statistical Analysis I (6 ECTS)

Descriptive Statistics, Probability (basic notions, conditional probability Bayes rule\} Combinatorics, distributions, Central limit theorem, statistics, decision theory (confidence intervals, hypothesis testing, comparison between populations), etc.

TABLE A: COURSES FOR STUDENTS OF MATHEMATICS AND STATISTICS

| Course Title | ECTS | Pure <br> Mathematics | Applied Mathematics | Probability/ Statistics |
| :---: | :---: | :---: | :---: | :---: |
| MAS 101 Calculus I | 8 | - | $\Delta$ | $\Delta$ |
| MAS 102 Calculus II | 8 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 121 Linear Algebra I | 8 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 122 Linear Algebra II | 8 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 131 Basic Mathematics I | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 132 Basic Mathematics II | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 133 Sets and Algebraic Structures | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 191 Mathematics with computers | 8 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 201 Multivariable Differential calculus | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 202 Multivariable Integral calculus | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 203 Ordinary Differential Equations | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 222 Number Theory | 7 |  |  |  |
| MAS 261 Probability I | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 262 Statistics I | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 271 Numerical Analysis I | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 301 Real Analysis | 8 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 302 Complex variables I | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 303 Partial Differential Equations | 7 | MAS(Pure)A | MAS(Applied)A or MAS(Pure)** | MAS(Pure)** |
| MAS 304 Functional Analysis | 7 | MAS(Pure)A | MAS(Applied)A or MAS(Pure)** | MAS(Pure)** |
| MAS 321 Introduction to Algebra | 7 | $\triangle$ | MAS(Pure)** | MAS(Pure)** |
| MAS 331 Classical Differential Geometry | 7 | $\triangle$ | $\triangle$ | $\triangle$ |
| MAS 350 Stochastic Processes | 7 | MAS(Statistics) | MAS(Statistics) | $\triangle$ |
| MAS 361 Probability II | 7 | MAS(Statistics) | MAS(Statistics) | $\triangle$ |
| MAS 362 Statistics II | 7 | MAS(Statistics) | MAS(Statistics) | $\triangle$ |
| MAS 371 Numerical Analysis II | 7 |  | MAS(Applied)A |  |
| MAS 401 Measure Theory and Integration | 7 | MAS(Pure)A | MAS(Pure)** | MAS(Pure)** |
| MAS 402 Complex Analysis II*** | 7 |  |  |  |
| MAS 403 Ordinary Differential Equations II | 7 |  | MAS(Applied)B |  |
| MAS 418 An Introduction to Fourier Analysis | 7 | MAS(Pure)A | MAS(Pure)** | MAS(Pure)** |
| MAS 419 Topics in Analysis*** | 7 |  |  |  |
| MAS 420 Approximation Theory | 7 |  | MAS(Applied)B |  |

## Notes:

ப = Compulsory Course.
** = Students can apply for a non-compulsory work placement during the summer months. A placement is credited with 1 ECTS for each month of work (the maximum placement duration is 3 months). The credits from a work placement count towards the 240 ECTS required for graduation.
Students may register for a work placement (1-3ECTS) only once, during the summer term either between the 2nd and 3rd or between the 3rd and 4th years of their studies. It is the students' responsibility to obtain the required remaining credits so that their study complies with the UCY/Department's rules and regulations.
Students can substitute 2 courses MAS XXX with a Diploma Project during the 4th year of their studies.
${ }^{* * *}=$ The courses can be taught (in the semester that are scheduled to be offered to the students) in the English language to non-native Greek students from other universities registered to these courses through the Erasmus ProgrammeNUFE. In this case, MAS students will attend these courses in the English language.
Course Title ECTS
MAS 422 Introduction to Coding Theory*** ..... 7
MAS 424 Theory of Rings and Modules ..... 7
MAS 425 Group Theory*** ..... 7
MAS 426 Field Theory ..... 7MAS 427 Group Representation Theory***MAS 429 Topics in Algebra***MAS 431 Introduction to Differentiable ManifoldsMAS 432 Introduction to Riemannian Geometry
MAS 433 TopologyMAS 434 Introduction to Algebraic Topology***
MAS 439 Introduction to Algebraic Geometry***
MAS 451 Linear Models IMAS 452 Linear Models II***MAS 454 Non-Parametric Statistics7MAS 455 Sampling Theory***MAS 456 Time Series ${ }^{* * *}$MAS 458 Statistical Data Analysis7MAS 459 Multivariable Analysis***7
MAS 466 Survival Analysis*** ..... 7
MAS 468 Topics in Probability - Statistics I*** ..... 7
MAS 469 Topics in Probability - Statistics II*** ..... 7
MAS 471 Numerical Solution of Ordinary Differential Equations ..... 7
MAS 472 Numerical Solution of Partial Differential Equations ..... 7
MAS 473 Introduction to the Finite Element Method ..... 7
MAS 481 Applied Mathematical Analysis ..... 7
MAS 482 Classical Mechanics ..... 7
MAS 483 Fluid Dynamics ..... 7
MAS 484 Introduction to Mathematical Modeling*** ..... 7
MAS 487 Topics from Applied Mathematics*** ..... 7
MAS 499 Independent Study ..... 7
MAS 501, MAS 502, MAS 503 Intership Programme I, II, III** ..... 1
MAS 510 Diploma Project 10 ..... 7
MAS 511 Diploma Project II ${ }^{\circ}$ ..... 7
MAS 512 Summer Research Project + ..... 0
MAS 857*, MAS 858* Mathematical Problem Solving Techniques ..... 4
Pure Mathematics
Applied Mathematics
Probability/Statistics

| MAS(Pure)B | MAS(Pure)B | MAS(Pure)B |
| :---: | :---: | :---: |
| MAS(Pure)B | MAS(Pure)** | MAS(Pure)** |
| MAS(Pure)B | MAS(Pure)** | MAS(Pure)** |
| MAS(Pure)B | MAS(Pure)** | MAS(Pure)** |


| MAS(Statistics) | MAS(Statistics) |  |
| :--- | :--- | :--- |
| MAS(Statistics) | MAS(Statistics) |  |
| MAS(Statistics) | MAS(Statistics) |  |

## COMPULSORY COURSES ACCORDING TO THE AREAS OF SPECIALIZATION

| Statistics | Pure Mathematics | Applied Mathematics |
| :---: | :---: | :---: |
|  | Compulsory Courses from other Department <br> (a) PHY 103 | Compulsory Courses from other Department <br> (a) PHY XXX |
| Compulsory Courses within the Department <br> (a) MAS 350 Stochastic Processes <br> (b) MAS 361 Probability II <br> (c) MAS 362 Statistics II <br> (d) MAS 451 Linear Models I <br> (e) MAS 454 Non-Parametric Statistics <br> (f) MAS 458 Statistical Data Analysis <br> (g) MAS 321 Introduction to Algebra or one course from the list MAS (Pure) A or one course from the list MAS (Pure) B. | Compulsory Courses within the Department <br> (a) MAS 321 Introduction to Algebra <br> (b) One course from the list MAS (Pure) A <br> (c) One course from the list MAS (Pure) B <br> (d) Two courses from the list MAS (Statistics) | Compulsory Courses within the Department <br> (a) Two courses from the list MAS (Applied) A <br> (b) Two courses from the list MAS (Applied) B <br> (c) Two courses from the list MAS (Statistics) <br> (d) MAS 321 Introduction to Algebra or one course from the list MAS (Pure) A or one course from the list MAS (Pure) B. |

Explanations:

| MAS (Applied) A | = | (a) MAS 303 Partial Differential Equations <br> (b) MAS 304 Functional Analysis <br> (c) MAS 371 Numerical Analysis II |
| :---: | :---: | :---: |
| MAS (Applied) B | $=$ | (a) MAS 403 Ordinary Differential Equations II <br> (b) MAS 420 Approximation Theory <br> (c) MAS 471 Numerical Solution of Ordinary Differential Equations <br> (d) MAS 472 Numerical Solution of Partial Differential Equations <br> (e) MAS 473 Introduction to the Finite Element Method <br> (f) MAS 481 Applied Mathematical Analysis <br> (g) MAS 482 Classical Mechanics <br> (h) MAS 483 Fluid Dynamic |
| MAS (Pure) A | $=$ | (a) MAS 303 Partial Differential Equations <br> (b) MAS 304 Functional Analysis <br> (c) MAS 401 Measure Theory and Integration <br> (d) MAS 418 An Introduction to Fourier Analysis |
| MAS (Pure) B | $=$ | (a) MAS 426 Field Theory <br> (b) MAS 431 Introduction to Differentiable Manifolds <br> (c) MAS 432 Introduction to Riemannian Geometry <br> (d) MAS 433 Topology |
| MAS (Statistics) | $=$ | (a) MAS 350 Stochastic Processes <br> (b) MAS 361 Probability II <br> (c) MAS 362 Statistics II <br> (d) MAS 451 Linear Models I <br> (e) MAS 454 Non-Parametric Statistics <br> (f) MAS 458 Statistical Data Analysis |

## TABLE B: COURSES OFFERED TO OTHER DEPARTMENTS

| Course Title |  | Department | ECTS |
| :---: | :---: | :---: | :---: |
| MAS 001 | Mathematics I | ECO, PBA, AFN, BIO | 6 |
| MAS 002 | Mathematics II | PBA, AFN, BIO | 6 |
| MAS 003 | Elements of Complex Analysis | PHY | 7.5 |
| MAS 007 | History of Mathematics | MAS, «E» | 5 |
| MAS 012 | Calculus for Computer Scientists I | CS | 5 |
| MAS 013 | Calculus for Computer Scientists II | CS | 5 |
| MAS 018 | Introductory Mathematics I | PHY, CHE | 5 |
| MAS 019 | Introductory Mathematics II | PHY, CHE | 5 |
| MAS 020 | Introductory Mathematics II | CHE | 5 |
| MAS 025 | Engineering Mathematics I | ECE, CEE, MME | 5 |
| MAS 026 | Engineering Mathematics II | ECE, MME | 5 |
| MAS 027 | Engineering Mathematics III | ECE, CEE, MME | 5 |
| MAS 028 | Mathematics for CEE | CEE | 5 |
| MAS 029 | Elements of Linear Algebra | ECE, CEE, MME, CS | 5 |
| MAE 030 | Introduction to Probability and Statistics | ECE, CEE | 5 |
| MAS 051 | Statistical Methods I | EDU, SPS, PSY | 5 |
| MAS 055 | Introduction to Probability and Statistics | CS | 7 |
| MAS 061 | Statistical Analysis I | ECO, PBA, AFN | 6 |

## Note:

«E» = Free Elective Course.

## TABLE C1: PURE MATHEMATICS - INDICATIVE PROGRAMME OF STUDIES



## Explanations:

| MAS XXX | $=\quad$ Elective Course within the Department |
| :--- | :--- |
| $*$ | $=\quad$ Elective Course from other departments (2courses) or MAS XXX |
|  | Elective course within the Department * |
|  | The credit units must add up to a minimum of 8 ECTS. |

MAS (PURE) A $\quad=\quad$ (a) MAS 303 Partial Differential Equations
(b) MAS 304 Functional Analysis
(c) MAS 401 Measure Theory and Integration
(d) MAS 418 An Introduction to Fourier Analysis

MAS (PURE) B $\quad=\quad$ (a) MAS 426 Field Theory
(b) MAS 431 Introduction to Differentiable Manifolds
(c) MAS 432 Introduction to Riemannian Geometry
(d) MAS 433 Topology

MAS (STATISTCS) $=$ (a) MAS 350 Stochastic Processes
(b) MAS 361 Probability II
(c) MAS 362 Statistics II
(d) MAS 451 Linear Models I
(e) MAS 454 Non-Parametric Statistics
(f) MAS 458 Statistical Data Analysis

Note: The same course may not be used to fulfil multiple requirements of a specialization.

## TABLE C2: APPLIED MATHEMATICS - INDICATIVE PROGRAMME OF STUDIES

| ECTS |  |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1st Semester |  | 5th Semester |  |
| MAS 121 Linear Algebra I | 8 | MAS 301 Real Analysis | 8 |
| MAS 131 Basic Mathematics I | 7 | MAS 331 Classical Differential Geometry | 7 |
| MAS 133 Sets and Algebraic Structures | 7 | MAS (APPLIED) A | 7 |
| CS 031 Introduction to Programming | 7 | MAS (PURE)** | 7 |
| TOTAL | 29 | TOTAL | 29 |
| 2nd Semester |  | 6th Semester |  |
| MAS 101 Calculus I | 8 | MAS 302 Complex variables I | 7 |
| MAS 122 Linear Algebra II | 8 | MAS (STATISTICS) | 7 |
| MAS 132 Basic Mathematics II | 7 | MAS (APPLIED) B | 7 |
| MAS 191 Mathematics with Computers | 8 | Foreign Language Course II | 5 |
| TOTAL | 31 | PHY 103 | 5 |
| 3 rd Semester TOTAL |  |  | 31 |
| MAS 102 Calculus II | 8 | 7th Semester |  |
| MAS 201 Multivariable Differential Calculus | 7 | MAS (STATISTICS) | 7 |
| MAS 261 Probability I | 7 | MAS (APPLIED) A | 7 |
| MAS 271 Numerical Analysis I | 7 | MAS (APPLIED) B | 7 |
| TOTAL | 29 | Elective Course from other departments (2 courses) or MAS XX Elective course within the Department * | 8 |
| 4th Semester |  | TOTAL | 29 |
| MAS 202 Multivariable Integral calculus | 7 |  |  |
| MAS 203 Ordinary Differential Equations | 7 | 8th Semester |  |
| MAS 262 Statistics I | 7 | MAS XXX Elective course within the Department | 7 |
| Foreign Language Course I | 5 | MAS XXX Elective course within the Department | 7 |
| Elective Course from other departments | 5 | MAS XXX Elective course within the Department | 7 |
| TOTAL | 31 | Elective Course from other departments | 5 |
|  |  | Elective Course from other departments | 5 |
|  |  | TOTAL | 31 |
|  |  | GRAND TOTAL | 240 |

Explanations:

| MAS XX | $=$ | Restricted Elective Course within the Department |
| :---: | :---: | :---: |
| * | = | Restricted Elective Course from other departments (2courses) or MAS XXX Restricted Elective course within the Department * The credit units must add up to a minimum of 8 ECTS. |
| MAS (PURE)** | $=$ | MAS 321 Introduction to Algebra or MAS (PURE) A or MAS (PURE) B |
| MAS (APPLIED) A | $=$ | (a) MAS 303 Partial Differential Equations <br> (b) MAS 304 Functional Analysis <br> (c) MAS 371 Numerical Analysis II |
| MAS (APPIED) B | $=$ | (a) MAS 403 Ordinary Differential Equations II <br> (b) MAS 420 Approximation Theory <br> (c) MAS 471 Numerical Solution of Ordinary Differential Equations <br> (d) MAS 472 Numerical Solution of Partial Differential Equations <br> (e) MAS 473 Introduction to the Finite Element Method <br> (f) MAS 481 Applied Mathematical Analysis <br> (g) MAS 482 Classical Mechanics <br> (h) MAS 483 Fluid Dynamics |
| MAS (STATISTICS) | $=$ | (a) MAS 350 Stochastic Processes <br> (b) MAS 361 Probability II <br> (c) MAS 362 Statistics II <br> (d) MAS 451 Linear Models I <br> (e) MAS 454 Non-Parametric Statistics <br> (f) MAS 458 Statistical Data Analysis |

Note: The same course may not be used to fulfill multiple requirements of a specialization.

## TABLE C3: STATISTICS - INDICATIVE PROGRAMME OF STUDIES

| 1 st Semester ECTS |  | ECTS |  |
| :---: | :---: | :---: | :---: |
|  |  | 5th Semester |  |
| MAS 121 Linear Algebra I | 8 | MAS 301 Real Analysis | 8 |
| MAS 131 Basic Mathematics I | 7 | MAS 331 Classical Differential Geometry | 7 |
| MAS 133 Sets and Algebraic Structures | 7 | MAS 350 Stochastic Processes | 7 |
| CS 031 Introduction to Programming | 7 | MAS 261 Probability I | 7 |
| TOTAL | 29 | TOTAL | 29 |
| 2nd Semester |  | 6th Semester |  |
| MAS 101 Calculus I | 8 | MAS 302 Complex variables I | 7 |
| MAS 122 Linear Algebra II | 8 | MAS 362 Statistics II | 7 |
| MAS 132 Basic Mathematics II | 7 | MAS 458 Statistical Data Analysis | 7 |
| MAS 191 Mathematics with computers | 8 | Foreign Language Course II | 5 |
| TOTAL | 31 | Elective Course from other departments | 5 |
| 3rd Semester |  | TOTAL | 31 |
| MAS 102 Calculus II | 8 | 7th Semester |  |
| MAS 201 Multivariable Differential calculus | 7 | MAS 454 Non-Parametric Statistics | 7 |
| MAS 261 Probability I | 7 | MAS 451 Linear Models I | 8 |
| MAS 271 Numerical Analysis I | 7 | MAS(PURE)** | 7 |
| TOTAL | 29 | MAS XXX Restricted elective course within the Department | 7 |
| 4th Semester |  | TOTAL | 29 |
| MAS 202 Multivariable Integral calculus | 7 | 8th Semester |  |
| MAS 203 Ordinary Differential Equations | 7 | MAS XXX Restricted elective course within the Department 7 |  |
| MAS 262 Statistics I | 7 | MAS XXX Restricted elective course within the Department | t 7 |
| Foreign Language Course I | 5 | MAS XXX Restricted elective course within the Department | t 7 |
| Elective Course from other departments | 5 | Free elective course from other departments | 5 |
| TOTAL | 31 | Free elective course from other departments | 5 |
|  |  | TOTAL | 31 |
|  |  | GRAND TOTAL | 240 |

## Explanations:

| MAS XXX | $=$ | Restricted Elective Course within the Department |
| :--- | :--- | :--- |
| MAS (PURE)** | $=\quad$ MAS $321-$ Introduction to Algebra or MAS (PURE) A or MAS (PURE) B |  |

Note: The same course may not be used to fulfill multiple requirements of a specialization.

## FACULTY OF PURE AND APPLIED SCIENCES



## DEPARTMENT OF PHYSICS

The main aims of the Department are to promote scientific knowledge, research and teaching in the area of Physics, to offer high quality education in Physics, and increase graduates' chances to be employed in the public sector and industry, or follow a career in academia and research. The Department offers undergraduate degree programmes leading to a Bachelor's Degree, as well as graduate programmes leading to the following degrees: Master in Physics, Master in Principles of Physics and Ph.D. in Physics. Special emphasis is placed on balanced learning, in both traditional classroom and laboratory settings. Teaching consists mainly of lectures and laboratory courses, supplemented by seminars and tutorial sessions.

## CHAIRPERSON

Nicolaos Toumbas

## VICE-CHAIRPERSON

Spiros Skourtis

## PROFESSORS

Constantia Alexandrou Constantinos Christofides Andreas Othonos Haralambos Panagopoulos Panos Razis

ASSOCIATE PROFESSORS
Georgios Archontis
Gregorios Itskos
Konstantinos Moulopoulos
Fotios Ptochos
Spiros Skourtis
Stavros Theodorakis
Nicolaos Toumbas
ASSISTANT PROFESSORS
Theodoros Trypiniotis
LECTURER
Halil Saka

## DEPARTMENT'S AIM

The physics programmes aim to develop transferable skills, such as the ability to express clearly and concisely scientific ideas in oral and written form, informatics skills, and gain experience in data and information acquisition and processing. Graduates of the Department of Physics can constructively apply their knowledge to address social and environmental issues.

The first Physics students were admitted in 1993. Each year, approximately 30 undergraduate students are enrolled as freshmen.

Graduates of the Department are qualified to seek employment in academia and industry, carry out research in institutions in Cyprus and abroad, or teach in secondary education. In addition, the study of Physics enables students to acquire analytical and computational skills to think and work methodically. Thus, Physics graduates are prepared for employment in any area where such skills are required, in addition to their areas of specialization.

## DEGREE PROGRAMME

The programme consists of four types of courses:

- Basic or Introductory Courses
- Core Courses
- Compulsory Courses from other departments
- Specialization Courses
- Elective Courses from at least three different faculties

The Basic or Introductory Courses are all compulsory and prerequisite for the Core Courses. The latter are also compulsory and cover many areas that a physicist must master. Upon completion of these courses, students will take a number of specialization courses. These courses aim at familiarizing students with concepts and topics that will be relevant to their final year project work and will help them to define their professional orientation on graduation.
The programme contains compulsory courses offered by other departments, such as the Department of Mathematics and Statistics, the Department of Chemistry and the Language Centre.

Finally, the programme requires students to take elective courses outside the Department, to complement the main area of studies. These options are selected in consultation with their academic advisor.

## SECONDARY (MINOR) DEGREE IN PHYSICS

In order to complete a secondary degree, the students must complete 60 ECTS. The students must take five compulsory (basic) courses, as well as three or four optional courses. One experimental course has to be included from the following list:

COURSE CODE
ECTS
PHY 114 Physics Laboratory I 7
PHY 115 Physics Laboratory II 7
PHY 216 Physics Laboratory III 6
PHY 302 Advanced Physics Laboratory I 6
PHY 322 Advanced Physics Laboratory II 6
PHY 350 Advanced Physics Laboratory 6
The programme is open to all students. In case the number of applications exceeds the available positions, a special committee is appointed to select students.

## FINAL YEAR PROJECT

The Final Year Project plays a special role in the undergraduate programme of the Department. Students work under the close supervision of a member of the academic staff of the Department, concentrating on a specialized topic. While carrying out the project, students learn to search and study the relevant literature, present seminars to their fellow students in a clear and concise way, and to record and report the essential conclusions. The project can address topics from theoretical, experimental or computational physics. Whereas the final year project does not have to be original, the Department expects the more capable students to be involved in the research activities of their supervisors.

These students will also receive a formal certification, signed by the Dean of the Faculty of Pure and Applied Sciences, the Chairperson of the Department and their academic advisor.

## COURSES OFFERED TO STUDENTS OF OTHER DEPARTMENTS

The following courses are offered to students of other departments:

## ECTS

## Fall Semester

PHY 101 Principles of Physics 6
PHY 102 Physics for Biologists and Chemists 6
PHY 103 Physics for Mathematicians 5
PHY 131 General Physics I: Mechanics and Waves
and Thermodynamics
PHY 134 Physics for Engineers 5
PHY 137 Physics for the Medical School 6

## Spring Semester

PHY 011 Modern Physics for Poets 5
PHY 012 Physics and Applications 5
PHY 013 The World in 2030: Energy, Technology,
History and Environment
PHY 132 General Physics II: Electricity and
Electromagnetic and Optics

## COURSES OFFERED IN ENGLISH

## Fall Semester

PHY 322 Advanced Physics Laboratory II 6
PHY 331 Particle Physics 6
PHY 347 Computational Physics 6
Spring Semester
PHY 350 Advanced Physics Laboratory 6
PHY 415 Biophysics 6
PHY 435 Theoretical Physics 6

## COURSE DESCRIPTIONS

PHY 011 Modern Physics for Poets (5 ECTS)
Culture as a function of our beliefs about space, time, boundaries, the vacuum, chaos. Principle of Relativityreversal of conventional viewpoints. Special and General Relativity. Warped Space and Time, Topology, Escher's art. Concepts of space and time in the Middle Ages and in naive-primitive-eastern- modern art. Wavefunctionsfuzzy boundaries. Virtual and real. SuperpositionInterpretation. Metamorphic Images in Surrealism. The observer (reader, spectator) as a participant in Physics (literature, art). Hypertexts. Aristotelian and Multivalued Logic. Self-Referentiality, Fractals. The Vacuum as a dynamic concept in Physics and Art. Dynamic entities in Postmodern Culture.

## PHY 012 Physics and Applications (5 ECTS)

Kinematics in one and two dimensions. Newton's Laws of Motion. Forces. Dynamics of circular motion. Work and energy. Conservative forces and the potential function. Simple harmonic motion and the ideal spring. Waves. Wave-particle duality. Heisenberg's Uncertainty Principle. Probability. The meaning of the wavefunction. The Schrödinger Equation. Solutions of the Schrödinger Equation for simple systems, such as: free particle, particle in a box, harmonic oscillator. Comparisons with classical results. Tunneling. Applications of Quantum Mechanics.

## PHY 013 The World in 2030: Energy, Technology, History

 and Environment (6 ECTS)A brief look at the history of energy and technology from antiquity, the Middle Ages, the Industrial Revolution, the 20th century, today and tomorrow. The prospects of Renewable Energy Sources and the deadlocks of conventional forms of energy. How changes in energy technologies affect history, geography, economics, politics and geopolitics. The timeless importance of solar architecture. The big futuristic technological plans, their importance for the environment and the climate crisis. Antarctica as the cuisine of the global climate but also as a place of cooperation and confrontation. Study cases and technico-economic analysis of green investments. The
dimension of Cyprus and the Eastern Mediterranean will be discussed almost in all chapters.

PHY 100 Foundations of Physics (7 ECTS)
A. Mechanics

Dimensional analysis; Measurements; Significant digits; Vectors; Vector components in one and more dimensions; Motion in one dimension (distance and displacement, speed, mean and instant velocity, mean and instant acceleration); Motion in two and three dimensions; Relative velocity and relative acceleration; Newton's laws; Examples of important forces (rope tension, perpendicular force by a surface, static and kinetic friction, buoyancy, air resistance); Kinematics of circular motion; Law of universal gravitation; Connection with circular motion; Gravitational potential energy.

## B. Electrostatics

Coulomb's law; The electric field; Electric potential energy; Electric potential; Electric current; Ohm's law; Electromotive force of a battery; Internal resistance of a battery; Simple electrical circuits with batteries and resistors; Kirchoff's laws; Capacitors.

PHY 101 Principles of Physics (6 ECTS)
Classical Physics: Inertial Frames and Newton's Laws. Conservation of Energy and Momentum. Centre of Mass. Rotational Motion. Modern Physics: Photoelectric effect. The wave-particle character of the microscopic world. The Uncertainty Principle. Nucleus and Radioactivity. Nuclear Fission and Fusion. The Michelson-Morley Experiment. Relativity of Space and Time. The Twin Paradox. Equivalence of gravity field and accelerated frames. Gravity and Geometry.

## PHY 102 Physics for Biologists and Chemists (6 ECTS)

Mechanics: Work, energy, momentum, torque, angular momentum, oscillations, fluid mechanics. Electricity and Magnetism: Electric fields, potential, dipoles, polarization, dielectrics, electric oscillations, magnetism in matter, diamagnetism, paramagnetism, alternating current circuits, electromagnetic radiation, semiconductors. Wave Motion Optics: Interference and diffraction of light waves, polarization of light, chemical applications of polarization and of light scattering, Bragg's Law, absorption and emission spectra.

## PHY 103 Physics for Mathematicians (5 ECTS)

Elements of Lagrangian and Hamiltonian Mechanics (and reference to Hamilton-Jacobi formulation as preparation for the passage to Quantum Mechanics). Elements of Electromagnetism/Classical Electrodynamics (MaxwellLorentz theory). Introduction to the Special Theory of Relativity. Elements of Quantum Mechanics: quantum states as vectors - and observables as (self-adjoint) operators - in Hilbert spaces, position and momentum representations and Fourier transforms, physical meaning of eigenvalues and eigenstates of Hermitian operators,
solution of Schrödinger equation (viewed as an ordinary or partial differential equation) in simple quantum systems Uncertainty Principle - Ehrenfest and Hellmann-Feynman theorems - Symmetries and Generators, gauge symmetry (and some of its nontrivial consequences).

## PHY 109 From Microscopic to Macroscopic Length

 Scales (6 ECTS)Physics at different length scales, dimensional analysis, concepts of quanta and relativity, elementary particles, atoms and molecules, biological physics, nanomaterials, condensed matter physics, optical physics, cosmology and astrophysics, applied physics, physics and computers.

## PHY 111 General Physics I (7 ECTS)

Measurement Units, Dimensional Analysis, Vectors. Motion in one and more dimensions, Velocity and Acceleration, Reference Frames. Forces, Newton's Laws. Work, Mechanical Energy. Momentum, Centre of Mass. Torque, Angular Momentum, Moment of Inertia. Oscillations. Universal Gravitation, Kepler's Laws. Fluid Mechanics.

## PHY 112 General Physics II (6 ECTS)

The meaning of electric charge. Coulomb's law. Definition of the electric field. Computation of the electric field of discrete and continuous charge distributions. The meaning of dipole moment. Electric field of a dipole. Torque of an electric dipole in an external electric field. Gauss'law. Electric Fields and Matter. Charging and polarization of insulators and conductors. Electric potential energy and electrostatic potential. Electrostatic potential difference. The meaning of capacitance. Computation of equivalent capacitance for capacitors in serial, parallel or composite connectivities. Energy stored in a charged capacitor. Capacitors with dielectrics. Electric field and current in a conductor. Microscopic model of current. The meaning of Resistance. Ohm's law. Simple circuits. Kirchhoff's rules. The RC circuit. The magnetic field. Detection of magnetic fields. Magnetic force on a moving charge and a currentcarrying wire. Magnetic dipole moment. Torque on a current loop in a uniform magnetic field. Motion of a charge particle in a uniform magnetic field. The Hall effect. Biot-Savart Law. Ampere's law. The magnetic field of simple current distributions. Magnetic flux and Gauss' law in Magnetism. Displacement current and the general form of Ampere's law. The law of Faraday and motional EMF. Induced EMF and electric fields. Generators and motors. Maxwell's equations. Electromagnetic waves. Self induction and mutual induction. The LC and RLC circuit.

## PHY 113 Modern Physics (6 ECTS)

Special Relativity: Reference frames, Michelson-Morley experiment, postulates of relativity, simultaneity, time dilation, length contraction, Lorentz transformations, causality, the geometry of spacetime, four-vectors, velocity and acceleration transformations, relativistic paradoxes, Doppler effect, relativistic momentum and energy and
their transformations, relativistic collisions. General Relativity: principle of equivalence, curved path of light, warped space and time, black holes. Quantum theory of light: black body radiation, photoelectric effect, Compton effect, wave-particle duality. Atomic nature of matter, the atom of Bohr, De Broglie matter waves, Heisenberg's principle of indeterminacy, quantum diffraction.

## PHY 114 Physics Laboratory I (7 ECTS)

1. Introduction to Data and Error Analysis (2 Weeks): Experimental measurement, significant figures, experimental uncertainties and propagation of uncertainties, normal distribution, the least square method, graphical plots, (semi)-logarithmic paper, histogram, 2. Experimental Exercises (10 Weeks): Simple pendulum. Collisions in one and two dimensions. Free fall. Projectile motion. Linear motion with constant acceleration. Conservation of energy. Circular motion. Moment of inertia of various rigid bodies. The gyroscope. Aerodynamics of rigid bodies, 3 . Week of practice/make-up experiments.

## PHY 115 Physics Laboratory II (7 ECTS)

An introductory lecture and 10 different experimental exercises from the fields of Electricity, Magnetism, Circuits, Kinetic Theory of Gases and Thermodynamics. The exercises include: 1. Maxwell Distribution of Velocities, 2. Heat Capacity of Gases, 3. Electrolysis, 4. Measuring the Magnetic Field of the Earth, 5. Charging of Capacitors, 6. Measurement of Magnetic Fields, 7. Magnetic Moment, 8. Magnetic Induction, 9. RLC Circuits, 10. Radiation Stephan Boltzmann Law.

PHY 131 General Physics I: Mechanics and Waves and Thermodynamics (6 ECTS)
(For the Department of Electrical and Computer Engineering) Measurement Units, Coordinate Systems. Motion in one and more dimensions, Velocity, Acceleration, Reference frames. Forces, Newton's Laws. Work, Mechanical energy. Momentum, Center of mass. Torque, Angular Momentum, Moment of Inertia. Oscillations. Universal Gravitation, Kepler's Laws. Wave equation, Transverse and Longitudinal waves. Phase and Group velocity. Thermodynamics. Heat and the First and Second Law, Engines, Refrigerators and Entropy, Blackbody Radiation, Planck's Quantum Hypothesis, Photoelectric Effect.

PHY 132 General Physics II: Electricity, Electromagnetism and Optics (6 ECTS)
(For the Department of Electrical and Computer Engineering) Electricity and Electromagnetism: Electric Fields. Gauss' Law. Electric Potential. Capacitance and Dielectrics. Current and Resistance. Magnetic Fields. Sources of Magnetic Field. Faraday's Law. Induction and Motors. Electromagnetic Waves, Doppler Effect for sound and light. Optics: Geometrical Optics, Haygen's and Fermat's principle, Optical Instruments. Interference, Young's Experiment, Michelson's Interferometer, Multiple Beam Interference,

Rayleigh's Resolution Criterion, Fraunhofer Diffraction, Diffraction Grading, Bragg's Law, Polarization, Malu's Law, Double Refraction, Production of circularly polarized light.

## PHY 134 Physics for Engineers (5 ECTS)

## (For the Department of Civil Engineering)

Introduction to Thermodynamics: Temperature, Thermal Dilation, Heat and Mechanisms of Heat Propagation, Internal Energy, First Thermodynamic Law. Ideal Gases: Law, Thermodynamic Processes, Internal Energy, Heat Capacity. Kinematics: Instantaneous and Average VelocityAcceleration, Projectile Motion. Newton's Laws and Applications, Friction, Drag, Circular-Relative Motion. KineticPotential Energy, Work, Principle of Energy Conservation. Linear Momentum and Momentum Conservation, Collisions, Center of Mass. Dynamics of Rotational Motion: Angular Velocity-Acceleration, Angular Momentum and Angular Momentum Conservation. Periodical Motion: Harmonic Oscillator, Equations and Energy, Simple and Natural Pendulum. Mechanical Waves: Mathematical Description, Wave Velocity-Acceleration-Energy.

## PHY 137 Physics for the Medical School (6 ECTS)

Elements of Mechanics (Newton's laws. Forces and Translational Equilibrium. Torques and Rotational Equilibrium. Work and Energy; Collisions. Elements of Elasticity Theory. Statics. Kinematics. Mechanical Properties of the Human Body). Fluids (Pressure and Density. Principles of Archimedes and Pascal. Continuity equation. Bernoulli Equation. Viscosity and Poiseuille Flow. Pressure and flow of Blood in the Human Body). Harmonic Motion and Waves (Properties of Sound. Doppler Effect. Ultrasounds. The Human Ear and Hearing). Elements of Electricity (Insulators and Conductors. Coulomb Law. Electric Field. Electric Potential. Capacity. Dielectrics. Electric Current and Ohm's Law. Nerve Conduction. ECG). Geometrical Optics (Index of refraction. Mirrors. Diffraction. Snell's law. The Lens Equation. The Camera. The Magnifying Glass; The Microscope; The Human Eye; Vision-correcting Lenses). Elements of Nuclear Physics (Nuclear Forces. Radioactivity; $\alpha, \beta, \gamma$. Decay. Interaction of Radiation with Matter. Dosimetry). Medical Applications of Molecular Biophysics (Relation between structure and dynamics of Macromolecules. Applications in Drug Design.

## PHY 140 Introduction to Scientific Computing (6 ECTS)

Introduction to the Linux operating system, Emacs editor, computer implementation of numbers. Introduction to shell commands and simple script writing. Introduction to the commands of the Python programming languages. Construction of simple programmes. File input and output. Control statements to loops and decisions. Introduction to Functions. Importing and using Python modules. Mathematical functions and graphs. Methods application for structuring the algorithmic aspects of programmes. Key concepts of Object-Oriented programming. Analysis of problem statements to produce simple OO designs. Data
types through classes declaration. Building collections of data within a programme. Use of exceptions and exceptions handling for robustness. Ways to debug a programme. Use of packages for scientific programming and visualization. Writing simple graphical applications to visualize experimental results and physics problem cases.

## PHY 145 Computational Methods in Physics (6 ECTS)

Introduction: The Linux operating system, Emacs editor, plotting, computer implementation of numbers, basic commands of the Python/C/Fortran programming languages. Ordinary differential equations: Numerical differentiation, Euler method, Runge-Kutta method. Applications to simple physical systems: planetary orbits, electronic circuits. Algebraic equations: Bisection method, Newton-Raphson algorithm. Systems of linear equations: Inverse matrices, matrix diagonalization. Applications in Classical Mechanics. Data analysis: Probability distributions, least squares method, fits. Numerical integration: Simpson method, Gaussian quadrature, multiple integrals in Physics. Deterministic randomness: Random number generators, simple simulations, Monte Carlo evaluation of integrals. High level programming languages: Introduction to the program Mathematica, symbolic computations, numerical and analytical evaluations of integrals and equations. Applications in Physics.

## PHY 210 Thermal Physics (6 ECTS)

Classification of systems. Intensive and Extensive variables. Reversible and irreversible processes. The concept of temperature. The 0th and 1st Laws of Thermodynamics. The Carnot cycle and the thermodynamic definition of entropy. The 2nd Law of Thermodynamics. Alternative formulations and their equivalency. Thermodynamic potentials (Availability, Helmholtz Free Energy. Enthalpy. Gibbs Free Energy. The Grand Potential). Thermal engines. The equation of Euler and the Gibbs-Duhem relation. The Clausius-Clapeyron equation. Maxwell relations and thermodynamic inequalities. The 3rd Law of Thermodynamics.

## PHY 211 Classical Mechanics (6 ECTS)

Inertial Frames of Reference and Generalized Coordinates. Newtonian Mechanics. Lagrangian Formalism. Conservation Laws. Motion in a Central Potential. Gravitational Fields. Small Amplitude Oscillations. Nonlinear Oscillations and Chaos. Scattering. Non-inertial Frames of Reference. Rigid Body Motion. Hamilton Equations.

## PHY 213 General Physics III (6 ECTS)

Wave Equation. Transverse and longitudinal waves. Phase and group velocity. Electromagnetic waves, Doppler effect for sound and light. Geometrical optics. Huygen's and Fermat's principle. Optical instruments. Interference. Young's experiment. Michelson's interferometer. Michelson's and Morley's experiment. Multiple-beam
interference. Rayleigh's resolution criterion. Fraunhofer diffraction. Diffraction grating. Bragg's law. Polarization. Malus' law. Brewster's law. Double refraction. Production of circular polarized light.

## PHY 216 Physics Laboratory III (6 ECTS)

Introductory experiment: understanding the use of an oscilloscope for visualizing and analysis signals, 1 . Wave oscillations in strings / Standing waves in springs,
2. Propagation and Doppler effect of ultrasound waves in air, 3. Thin lenses laws-Geometrical Optics, 4. Measurement of the speed of light, 5. Fraunhofer diffraction, 6. Prism and Diffraction spectrometers, 7. Thin film interference, 8. Michelson Interferometer, 9. Polarization of light - Malus law, 10. Polarization by reflection - Fresnel laws.

PHY 221 Mathematical Methods of Physics I (6 ECTS)
Vector Calculus and Applications: Multiple integrals, Line and surface integrals. Gradient, divergence, curl. The theorems of Green, Gauss, Stokes. Applications in the mechanics of rigid bodies, Hydrodynamics and Electromagnetism. Systems with axial and spherical symmetry. Fourier Series: Fourier series and integrals. Convergence criteria. Applications in wave mechanics, Orthogonal functions in Electrostatics and in Quantum Mechanics. Applications of Ordinary Differential Equations in Mechanics, Electromagnetism, Quantum Mechanics: Classification. Existence and uniqueness of solutions. Physical systems with linear, nonlinear and chaotic behavior. Conservative systems, driving forces. Analytic methods for solving second order equations. Systems of equations. Power series solutions. Laplace transform. The Dirac function

## PHY 222 Mathematical Methods of Physics II (6 ECTS)

Boundary value problems for ordinary and Partial Differential Equations (PDEs). Sturm-Liouville Theory. Selfadjoint Boundary Conditions. Separation of Variables in the Wave. Heat. The Schrödinger and the Laplace Equations. Bessel Functions. Legendre Polynomials. Spherical Harmonics. Continuous Sets of Eigenfunctions. The Dirac $\delta$ function. The Heaviside $\theta$-function. Concept and use of Propagator. Green's Functions. Poisson Equation. Inhomogeneous Helmholtz Equation. Quantum Scattering and Born Series. Finite Regions and the Method of Images. Minimal substitution in Schrödinger's equation and application to the Physics of Landau Levels.

## PHY 225 Quantum Mechanics I (6 ECTS)

Schrödinger's Equation and the Wavefunction. The Statistical Interpretation, Wavefunction Normalization. Position/Momentum Operators. The Hamiltonian. The Heisenberg Uncertainty Principle. Stationary States. Solutions of Schrödinger's Equation for the following Onedimensional Potentials: Infinite Square Well. Harmonic Oscillator. Free particle. Delta Function Potential. Finite Square Well. The Formalism of Quantum Mechanics. Hilbert
space. Operators and Commutation Relations. Generalized Statistical Interpretation and Uncertainty Relations.
Angular Momentum and Three-Dimensional Potentials.

## PHY 231 Electromagnetism I (7 ECTS)

Mathematical introduction: Gradient, Divergence and Curl theorems. Electrostatics: Electrostatic field, potential, work and energy. Conductors. Mathematical techniques for the solution of electrostatic potentials and applications. Electrostatic fields in matter: The polarization and the displacement fields. Linear dielectrics. Magnetostatics: Magnetic field, Lorentz force, Biot-Savart law, Magnetic vector potential. Magnetostatic fields in materials: Magnetization and the H field. Electrodynamics: Electromotive force. Faraday's law. Maxwell equations.

## PHY 235 Electromagnetism II - Special Theory of Relativity (7 ECTS)

Electromagnetic (E/M) Waves: Waves in one dimension (wave equation, sinusoidal waves, boundary conditions, reflection and transmission, polarization). $\mathrm{E} / \mathrm{M}$ waves in vacuum (the wave equation for $E$ and $B$ monochromatic plane waves, energy and momentum in E/M waves). E/M waves in matter (propagation in linear media, reflection and transmission). Absorption and dispersion (E/M waves in conductors, reflection at a conducting surface, the frequency dependence of permittivity). Guided waves (waveguides, EH waves in a rectangular waveguide, the coaxial transmission line). Potential and fields:The potential formulation (scalar and vector potentials. Gauge transformations. The Coulomb and Lorentz gauge). Retarded and advanced potentials. Lienard-Wiechert potentials. The fields of a moving point charge. Electromagnetic radiation: Dipole radiation (electric and magnetic dipole radiation, radiation from an arbitrary source, power radiated by point charge, radiation reaction). Electrodynamics and relativity: The special theory of relativity (Einstein's postulates, the geometry of relativity, the Lorentz transformations, the structure of space-time, applications). Relativistic mechanics (proper time and proper velocity, relativistic energy and momentum, relativistic kinematics, relativistic dynamics, applications). Relativistic electrodynamics (the transformation of the fields, the field tensor, electrodynamics in tensor notation, relativistic potentials).

## PHY 301 Solid State Physics (6 ECTS)

Crystal Structure. Crystal Lattice and Reciprocal Lattice. Bragg and Laue Equations. X-ray Diffraction from Crystals. Crystal Bonds. Madelung Energy. Crystal Vibrations. Phonons. Specific Heat of Solids. Einstein and Debye Models. Thermal Conductivity. Free Electron Gas. Electrical Conductivity. Classical Hall Effect. Energy Band Theory. Theorem Bloch. Semiconductors: Energy gap. Holes. Effective Mass. Impurity Conductivity. Propagation of Electromagnetic Waves in Crystals. Optical Constants. Absorption. Excitons. Luminescence. Electrons in High

Magnetic Fields. Landau Levels. Quantum Hall Effect. Phenomenology of Superconductivity. Meissner Effect.

## PHY 302 Advanced Physics Laboratory I (6 ECTS)

The course consists of the following experiments: 1. Energy gap of Silicon - Determination of the silicon energy gap using optical spectroscopy. 2. Identify the properties of a focused laser beam with a micron spatial resolution using a lock amplifier technique. 3. Determine the emission from various light emitting diodes using a grating to resolve its spectral content. 4. Measurement of optical coupling in single-mode optical fiber using a He-Ne laser free space coupling. 5. Michelson interferometer and measurements of optical properties in the material. 6. Electrical conduction and Hall phenomena in Germanium. 7. Photovoltaic phenomena and measurements of the performance of monocrystalline and polycrystalline silicon solar cells 8 . Hall Effects on Cu and Zn . 9. The study of photoelectric phenomena and the determination of the Planck constant. 10. The study of X-ray diffraction and the determination of the Planck constant using the Bragg dispersion from crystalline NaCl . 11. The study of electromagnetic phenomena in the microwave area of the spectrum. 12. Study of semiconductor devices and transistors using various electrical circuits.

## PHY 321 Nuclear Physics (6 ECTS)

1. Introduction, 2. Rutherford atomic model and scattering cross sections, 3 . Collisions particle kinematics, 4. Properties of atomic nuclei - nuclear radii and masses, 5 . Nuclear reactions and their kinematics, 6. Radioactivity and radioactive chain decay, 7. Alpha decay, 8. Beta decay, 9. Gamma decay, 10. Nuclear fission, nuclear fusion and applications, 11. Elements of "big bang" cosmology and nuclear astrophysics, 12. Nuclear models.

## PHY 322 Advanced Physics Laboratory II (6 ECTS)

Introduction: 1.1 Gauss and Poisson Distributions, 1.2 Least Squares Method, 1.3 Interaction of Charged Particles with Matter, 1.4. 2. Basic Nuclear Electronics Experiments: 2.1 Measurement of the Specific Charge of the Electron, 2.2 Observation of the Zeeman Effect, 2.3 Electron Spin Resonance, 2.4 The Compton Effect, 2.5 X-Ray Fluorescence and Moseley's Law, 2.6 Rutherford Scattering, 2.7 Spectroscopy of a-Particles, 2.8 Spectroscopy of $\beta$-Particles, 2.9 Spectroscopy of $\gamma$-Rays, 2.10 The Geiger-Müller Counter.

## PHY 326 Quantum Mechanics II (6 ECTS)

The Hydrogen Atom. Angular Momentum and Spin. Addition of Angular Momenta. Identical Particles. The Periodic Table. Time Independent Perturbation Theory. The Variational Method. Time Dependent Perturbation Theory. Zeeman and Stark Effects. Radiation. Einstein Coefficients. The Aharonov-Bohm Effect. Measurement Theory. Basic Principles of Atomic Physics. Modern Developments.

## PHY 331 Particle Physics (6 ECTS)

Brief historical background, particles of matter and fundamental interactions. The Standard Model, particle lifetime and decays, processes and cross- sections. Interactions of particles and radiation with matter, particle detectors and accelerator systems. Applications of Particle Physics in Medicine. Technology and Industry. Symmetries, quantum numbers and conservation laws. Symmetry violations, local gauge transformations. Quantum Electrodynamics. Introduction to Feynman diagrams, electromagnetic interactions and coupling constant. Weak Interactions, charged and neutral currents, the $\pi, \mu$ and $\tau$ lepton decays. The CKM matrix. Quantum Chromodynamics, asymptotic freedom and confinement. The parton model, e+e-scattering to hadrons. Scattering of $\mathrm{e} / \mathrm{p}$, deep inelastic scattering and the hadron quark model. Isospin and parton structure functions. Properties of intermediate Vector Bosons. Electroweak Theory. Spontaneous symmetry breaking, the Higgs Mechanism and the discovery of the Higgs boson. Neutrino masses and oscillations. CP violation and recent experimental results. Problems of the Standard Model and the need for physics beyond the Standard Model.

## PHY 341 Electronics (6 ECTS)

DC and AC circuits. Semiconductors and applications to circuits. PN junction diodes. Bipolar transistors. Field-effect transistors, operational amplifiers. In parallel with these lectures there will be experiments related to the above areas (hands-on experience with electronics).

## PHY 342 Statistical Physics and Thermodynamics (6 ECTS)

The concept of phase space. The statistical mechanical definition of entropy. Microcanonical ensemble and examples (two-level system, classical and quantum ideal gas, classical and quantum harmonic oscillator). Canonical ensemble (derivation of the Boltzmann factor, relation between partition function and thermodynamic quantities, classical ideal gas, classical harmonic oscillator, the equipartition theorem, paramagnetism, rotational partition function. The grand-canonical ensemble. Derivation of the mean occupation number in Bose-Einstein, Fermi-Dirac statistics. The quantum ideal gas. Applications of FermiDirac and Bose-Einstein statistics (Einstein and Debye models for the heat capacity of solids, the photon gas, free electrons in metals, white dwarves, Bose-Einstein condensation.) Ising model in one dimension.

## PHY 347 Computational Physics (6 ECTS)

A C++ based computational physics course covering topics such as solving problems in linear algebra, finding of eigenvectors and eigenvalues, solutions of ordinary and partial differential equations, methods for chaotic and stochastic situations, use of Markov chains and Monte Carlo simulations with applications in physics. Metropolis algorithm and applications in physics problems, random
walks and the 2-D Ising model, fitting techniques with and without constraints.

## PHY 350 Advanced Physics Laboratory (6 ECTS)

A selection of the following experiments in modern optics, material, condensed matter, high energy and particle physics: 1. LabView programming for interfacing programming, 2. FPGA programming, 3. Quantum cryptography, 4. Quantum Eraser/Interference, 5. Optical tweezers, 6. Atomic force microscope, 7. Optical tunneling microscope, 8. Magneto optic phenomena (Kerr effect), 9. Fizeau - measurement of speed of light, 10. Measurement of Muon lifetime, 11. Measurement of $\mathrm{dE} / \mathrm{dx}$.

PHY 361 and PHY 362 Principles and Practice of Physics I and II (7 ECTS \& 7 ECTS)

Selected topics from Mechanics and Thermodynamics: Kinematics. Newton's Laws and Momentum Conservation Energy forms and Energy Conservation. Rigid Body Motion and Angular Momentum conservation. Gravity. Oscillations Reference Frames and Elements of Relativity. Elements of Thermodynamics. Electromagnetism: Electric Fields. Electric Potential. Circuits. Magnetic Fields. Induction, alternating currents. Maxwell's Equations. Electromagnetic waves. Waves and Optics: Classification and characteristics of waves, the wave equation, wave interference and diffraction, nature and propagation of sound, sound sources, nature and propagation of light, geometric optics and optical instruments, interference and diffraction.

## PHY 405 Cosmology and General Theory of Relativity (6 ECTS)

Observations leading to General Relativity. Phenomena studied by Cosmology. Spacetime in General Relativity. Geodesics and gravitational potential. Stress-energy tensor. Riemann curvature tensor. Einstein equations. The Schwarzschild solution. Classic tests of General Relativity: Calculation and experimental verification. Black holes: Schwarzschild. Kerr. Their thermodynamics, evaporation, Observations. Gravitational radiation, detectors, power of gravitational radiation. The expanding Universe. Robertson-Walker metric. Friedmann models. Event horizon. Particle horizon. Big Bang: The evidence for it. Physical processes at various stages of the Universe. Dark matter and dark energy.

## PHY 415 Biophysics (6 ECTS)

Description of the various biomolecular classes. Intra- and intermolecular interactions. The role of water. The 20 naturally occurring amino acids and their physicochemical properties. Protein primary, secondary and tertiary structure. Protein thermodynamics and folding. Importance of heteropolymeric character for the stabilization of a unique native structure. Application of the Random Energy Model in protein stability. The helix-coil transition. Examples of protein action. Hemoglobin and models of allostery. Basic elements of biomolecular
modeling. Typical energy functions used in biomolecular modeling. Normal mode calculations and their application in the study of protein properties. Biomolecular dynamics simulations. Implicit solvent models. Continuum electrostatic approximations (Poisson-Boltzmann and Generalized Born). MD-based Free-energy calculations (method of thermodynamics integration and thermodynamic perturbation). Application of implicitsolvent and MD-based free-energy methods in the study of biomolecular association).

## PHY 427 Atomic and Molecular Physics (6 ECTS)

Atomic Physics: Angular momentum and spin. The hydrogen atom. Approximate methods for the solution of the Schrodinger equation. Atomic structure and spectra. Molecular Physics: The Born-Oppenheimer approximation. The chemical bond: The $\mathrm{H} 2+$ molecular ion, the H 2 molecule, valence-bond and molecular-orbital theories. The Hartree-Fock method. Molecular electronic structure and spectra.

## PHY 435 Theoretical Physics (6 ECTS)

Symmetries: Definition, physical consequences of symmetries. Symmetries in Classical mechanics. Symmetries in Quantum mechanics. Heisenberg equations. Classical fields: Scalar fields. Gauge invariance, electromagnetism, energy and momentum tensor. Relativistic quantum mechanics: Klein Gordon equation. Dirac equation, introduction to second quantization. Scattering theory: Green's functions, asymptotic states, potential scattering, resonances. Feynman path integrals: Classical action, transition amplitude of a non-relativistic quantum mechanical system, the propagator of a free particle, particle in a electromagnetic field, numerical simulation.

## PHY 445 Electronic Systems (6 ECTS)

Semiconductor Physics (Basic properties, energy bands and band gap, doping, carrier transport and carrier statistics, excitation/recombination). Transport processes and devices. Bipolar junctions ( $p-n$ junction. Junction technology. Junction formation and band structure. Depletion region. Carrier transport processes. I-V curve. Junction breakdown). Metal-Semiconductor Junctions (Junction formation and band structure. Depletion region. Schottky effect. Carrier transport processes. I-V curve. Ohmic contacts). Optoelectronics. Optoelectronic devices (Introduction. Radiative transitions. Light emitting diodes. Laser diodes). Photodetectors (Photodiode. Avalanche photodiode. Phototransistor). Solar Cells (Introduction. p-n junction based solar cells. Thin film photovoltaics. Nanoelectronics - Spintronics (Introduction. Magnetic memory physics. Magnetic Sensors. Spin for future magnetic memories. Nanoparticles and their applications in biotechnology and photovoltaics).

## LIST OF COURSES

## 1. Basic or Introductory Courses (78.5 ECTS)

PHY 100 Foundations of Physics
PHY 109 From Microscopic to Macroscopic Length Scales
PHY 111 General Physics I
PHY 112 General Physics II
PHY 113 Modern Physics
PHY 114 Physics Laboratory I
PHY 115 Physics Laboratory II
PHY 140 Introduction to Scientific Computing
PHY 145 Computational Methods in Physics
PHY 213 General Physics III
PHY 216 Physics Laboratory III
2. Core Courses (62 ECTS)

PHY 210 Thermal Physics
PHY 211 Classical Mechanics
PHY 221 Mathematical Methods of Physics I
PHY 222 Mathematical Methods of Physics II
PHY 225 Quantum Mechanics I
PHY 231 Electromagnetism I
PHY 235 Electromagnetism II - Special Theory of Relativity
PHY 326 Quantum Mechanics II
PHY 342 Statistical Physics and Thermodynamics

## 3. Specialized Courses (75 ECTS)

PHY 301 Solid State Physics
PHY 302 Advanced Physics Laboratory I
PHY 321 Nuclear Physics
PHY 322 Advanced Physics Laboratory II
PHY 331 Particle Physics
PHY 341 Electronic Physics
PHY 347 Computational Physics
PHY 350 Advanced Physics Laboratory

PHY 361 Principles and Practice of Physics I
PHY 362 Principles and Practice of Physics II
PHY 405 Cosmology and General Theory of Relativity
PHY 411 Final Year Project I
PHY 412 Final Year Project II
PHY 415 Biophysics
PHY 427 Atomic and Molecular Physics
PHY 435 Theoretical Physics
PHY 445 Electronic Systems
PHY 501 Placement to Organization
PHY 502 Placement to Organization
PHY 503 Placement to Organization
4. Compulsory Courses from other departments (26 ECTS)

## Foreign Language

Two Semi-annual Courses: LAN 100 and LAN 112

## Mathematics

Two Courses: MAS 018 and MAS 019
The two courses (MAS 018 and MAS 019) from the Department of Mathematics and Statistics are introductory and specifically designed to satisfy the math requirements of physics students, as determined by the Department of Physics.

## Chemistry

One Course: CHE 021 Introductory Chemistry (for Biologists and Physicists)

## 5. Elective Courses (20 ECTS)

Students are required to complete 20 ECTS of Elective Courses outside of their main area of studies. The courses must be from three different faculties.

## ANALYTICAL PROGRAMME OF STUDIES

| ECTS |  |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1 st YEAR |  | 3rd YEAR |  |
| Fall Semester |  | Fall Semester |  |
| PHY 100 Foundation of Physics | 7 | PHY 113 Modern Physics | 6 |
| CHE 021 Introduction ro Chemistry for Students of Physics |  | PHY 231 Electromagnetism I | 7 |
| and Biology | 6 | PHY 342 Statistical Physics | 6 |
| MAS 018 Introductory Mathematics I | 5 | PHY 326 Quantum Mechanics II | 6 |
| PHY 109 From Microscopic to Macroscopic Length Scales | 6 | XXX Free Elective Course | 5 |
| PHY 140 Introduction to Scientific Computing | 6 | TOTAL | 30 |
| TOTAL | 30 | Spring Semester |  |
| Spring Semester |  |  |  |
| PHY 111 General Physics I | 7 | PHY XXX Elective Course | 6 |
| PHY 114 Physics Laboratoryl | 7 | PHY XXX Elective Course | 6 |
| MAS 019 Introductory Mathematics II | 5 | PHY XXX Elective Course | 6 |
| PHY 145 Computational Methods in Physics | 6 | XXX Free Elective Course | 5 |
| LAN 100 General Advanced English | 5 | TOTAL | 30 |
| TOTAL | 30 | YEAR TOTAL | 60 |
| YEAR TOTAL | 60 | 4th YEAR |  |
| 2nd YEAR |  | Fall Semester |  |
| Fall Semester |  | PHY XXX Elective Course | 7 |
| PHY 112 General Physics II | 6 | $\begin{array}{ll}\text { PHY XXX } & \text { Elective Course } \\ \text { PHY XXX } & \text { Elective Course }\end{array}$ | 6 |
| PHY 115 Physics Laboratory II | 7 | PHY XXX Elective Course | 6 |
| PHY 221 Mathematical Methods I | 6 | XXX Free Elective Course | 5 |
| PHY 213 General Physics II | 6 | TOTAL | 30 |
| LAN 112 English for Physics | 5 | TOTAL | 30 |
| TOTAL | 30 | Spring Semester |  |
| Spring Semester |  | PHY XXX Elective Course | 7 |
| PHY 210 Thermal Physics | 6 | PHY XXX Elective Course | 6 |
| PHY 216 Physics Laboratory III | 6 | PHY XXX Elective Course | 6 |
| PHY 222 Mathematical Methods II | 6 | PHY XXX Elective Course | 6 |
| PHY 225 Quantum Mechanics I | 6 | XXX Free Elective Course | 0 |
| PHY 211 Classical Mechanics | 6 | TOTAL | 30 |
| TOTAL | 30 | YEAR TOTAL | 60 |
| YEAR TOTAL | 60 | GRAND TOTAL | 240 |

## ELECTIVE COURSES

PHY 301 Solid State Physics
PHY 302 Advanced Physics Laboratory I 6
CS Laboratory I
PHY 322 Advanced Physics Laboratory II
PHY 331 Particle Physics
PHY 341 Electronic Physics
PHY 347 Computational Physics
PHY 350 Advanced Physics Laboratory
PHY 361 Principles and Practice of Physics I
PHY 362 Principles and Practice of Physics II

PHY 405 Cosmology and General Theory of Relativity 6
PHY 411 Final Year Project I 7
PHY 412 Final Year Project II 7
PHY 415 Biophysics 6
PHY 427 Atomic and Molecular Physics 6
PHY 435 Theoretical Physics 6
PHY 445 Electronic Systems 6
PHY 501 Placement to Organization 2
PHY 502 Placement to Organization 2
PHY 503 Placement to Organization 2

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# FACULTY OF SOCIAL SCIENCES AND EDUCATION 

Department of Education
Department of Law
Department of Psychology
Department of Social and Political Sciences

www.ucy.ac.cy/edu/en

## DEPARTMENT OF EDUCATION

The Department of Education aims at contributing to the ethnic, social, cultural and developmental needs of the country. The Department considers education as a major force towards growth and development of the Cyprus society. In this context, the Department's mission is to promote quality and equity in education by improving the quality of teaching, the organization and management of the educational system and providing innovative approaches to the investigation and analysis of important educational issues.

## CHAIRPERSON

Zacharias Zacharia
VICE-CHAIRPERSON
Constantinos Korfiatis
PROFESSORS
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Simoni Symeonidou
ASSISTANT PROFESSORS
Eleftherios Klerides
Stavroula Kontovourki
Stavroula Philippou

## LECTURERS

Panayiotis Antoniou
Marios Pitallis
EMERITUS PROFESSORS
Constantinos Christou
Athanassios Gagatsis
Mary loannides-Koutselini

## DEPARTMENT'S MISSION

In relation to research, the Department aims at:
-The promotion of excellence in educational research.
-The use of research to generate new knowledge about important aspects of education and to provide solutions to social and educational problems.
-The development of effective scholars and practitioners who will be able to apply their knowledge at a professional level and drive innovation in teaching, learning and in the role of a teacher/educator in real learning environments.

In relation to teaching, the Department aims at
-The production and dissemination of research-based knowledge in Pedagogical Sciences.

- Developing post-graduate students' qualities and qualifications in order to strengthen their knowledge and competencies in different areas of education.
- The education and preparation of teachers for primary and pre-primary school teaching in real learning environments.
- Providing pedagogical training and developing pedagogical expertise for those who intend to teach in secondary and technical education.
- Providing in-service and professional development programmes for the teaching personnel of public schools in Cyprus.

In order to achieve its mission, the Department has developed:

- A teacher education programme leading to a Bachelor Degree in Primary and Pre-Primary School Teaching. An additional programme is also developed, leading to a teacher certification for prospective secondary and technical education teachers.
- Postgraduate programmes lead to Master and Doctoral degrees in different subject areas within the field of Educational Studies (Learning in Natural Sciences and Environment, Educational Administration and Evaluation, Curriculum Studies, Teaching and Comparative Education, Mathematics Education, Special and Inclusive Education, Language Literacy and Education, Pedagogical Sciences, Gender Studies).

Furthermore, the Department intends to develop a new undergraduate programme in "Lifelong Learning and Service Management". The programme aims at educating individuals in Service Management and equipping them with the appropriate tools in order to provide efficient service to new educational and organizational entities in modern societies.

## PROGRAMME OF STUDIES FOR PRIMARY AND PRE-PRIMARY SCHOOL TEACHERS DEGREES

## Duration and Areas of Studies

For a Bachelor Degree in Elementary School Teaching or Kindergarten School Teaching, students must successfully complete at least 240 ECTS. The courses are divided into:
a) Compulsory, with 195 ECTS for primary school teachers and 201 ECTS for pre-primary school teachers.
b) Elective Courses, with 30 ECTS for primary school teachers and 24 ECTS for pre-primary school teachers.
c) Free Elective Courses, with 15 ECTS for primary school teachers and pre-primary school teachers.

The programme of study consists the following areas:

## Pedagogical Science

Primary school teachers and pre-primary school teachers must complete eight courses (47 ECTS), out of which five courses are compulsory and three courses are electives.

## Content Area Courses

All courses are Compulsory (34 ECTS) for primary school teachers and (58 ECTS) for pre-primary school teachers.

## Teaching Methodology, Evaluation and Research

All courses are Compulsory. Primary school teachers must complete thirteen courses in total (78 ECTS): three courses of Research and Teaching Methodology (18 ECTS), eight Teaching Courses (48 ECTS) and two Elective Courses (12 ECTS). Pre-primary school teachers must complete thirteen courses in total (78 ECTS): three Courses of Research and Teaching Courses (18 ECTS), nine General and Special Teaching Courses (54 ECTS) and one Elective Course (6 ECTS).

## School Experience Programme

## Primary School Teacher

School Experience consists of three phases:

- Phase I (EDU 229): takes place in the second year of studies, fall or spring semester. Students attend weekly lectures and seminars at the University. Students visit schools and observe school life and lessons.
- Phase II (EDU 329): is conducted during the third year of studies (fall or spring semester). Students are required to attend weekly lectures and seminars at the University during their practicum. During their weekly presence at schools they are required to conduct a number of classroom observations and teaching sessions. Each student is placed in a specific class in order to fulfil the requirements of the programme.
- Phase III (EDU 429): takes place in the fourth year of studies, either fall or spring semester. Students attend weekly lectures and seminars at the University. Students visit schools every day and they are placed in separate classes.


## Pre-Primary School Teacher

School Experience consists of three phases:

- Phase I (EDU 239): takes place in the second year of studies, either fall or spring semester. Students attend weekly seminars at the University. Students visit schools one day per week. A second-year student is placed in the class, where a fourth-year student carries out his/her early field experience.
- Phase II (EDU 339): takes place in the third year of studies, either fall or spring semester. Students attend weekly seminars at the University. Students visit schools one day per week and two students are placed in the same class.
- Phase III (EDU 439): takes place in the fourth year of studies, either fall or spring semester. Students attend weekly seminars at the University. Students visit schools every day and are placed in separate classes.


## Specialization (A and B)

Specialization is required only for the degree of primary school teachers. Students are required to complete 24 ECTS (12 ECTS from specialization A and 12 ECTS from specialization B either from the third or the fourth year of studies). Students must select two specialization areas from the following:

## Specialization A: Greek Language, Mathematics, Science Education

## Language Arts Education (Greek Language)

The specialization promotes students' in-depth learning in regards to Greek language teaching, through the examination of different pistemological traditions in language arts and literacy education (e.g. linguistic, communicative-functional, sociocultural models), and an emphasis on contemporary approaches to literacy (e.g. new literacies, multimodality, critical literacy). Attention is concurrently paid to methodological issues pertaining to the teaching of language arts, including the teaching of literature, so that students become creative and reflective practitioners by engaging in lesson plan development, text analysis, and the design of instructional material and learning experiences. Students are expected to successfully complete two of the four offered courses (EDU 422 Greek Language Instruction II; EDU 424 Multiliteracies and Multimodalities).

These courses constitute the forum for students' experiential learning, that focuses on the examination of multiple perspectives on language and literacy, and offers them opportunities to gain a broad understanding of
current issues and challenges of language arts and literacy education in and beyond the (Greek) Cypriot context.

## Mathematics Education

The specialization focuses on the in-depth study of contemporary trends in the teaching and learning of mathematics. Prospective teachers will have the opportunity to learn about a number of strategies and practices involved in the teaching of fundamental mathematical concepts. In particular, prospective teachers will study: (a) Cyprus mathematics curriculum, (b) research findings regarding students' difficulties and the development of mathematical thinking, (c) teaching practices and ways of utilizing teaching material, (d) students' answers and ways of thinking and (e) effective ways of incorporating digital tools in mathematics teaching, and of developing educational material. The main objective of this specialization is to prepare prospective teachers who will skillfully address students' difficulties in mathematics, to link effectively mathematical concepts, and to employ appropriate didactical models and tools in order to enhance their students' understanding. Students will develop critical skills for post-graduate studies and will broaden their employment prospects, since mathematics holds an important role both in school curriculum and in everyday life. Students will also develop the knowledge, skills and abilities that would be valuable in succeeding to any future professional teaching examinations.

The specialization in Mathematics Education consists of two courses. In the course EDU 473 (Didactic of Numbers and Algebra in the Primary School), special emphasis is given on the study of teaching models, representations and practices used in numeracy and algebra teaching in elementary school. In course EDU 474 (Critical, Creative Thinking and Assessment in Mathematics), students explore new approaches to critical and creative thinking in mathematics as well as modern approaches to student evaluation and assessment.

## Science Education

The Science Education specialization aims at offering students knowledge and skills necessary for teaching science at the elementary school level. Specifically, the courses of the Science Education specialization provide information about the extant theoretical and practical practices and procedures followed, when teaching science at the elementary school level. The goal is to review the basic methods/approaches, principles and strategies for enacting effectively science teaching and learning. In order to complete the Science Education specialization, students are required to attend and fulfil the requirements of the following two courses: EDU 488 Contemporary Dimensions of Biology Education, EDU 489 Computer Science Applications and Modern Trends in Science Teaching.

As shown in the course descriptions of the above courses, the Science Education specialization focuses on topics derived from the extant research of science education. All
courses combined aim firstly at providing support to student teachers to become effective in teaching science at the elementary school level in the future, as well as to those who will attend postgraduate studies in science education.

## Specialization B: Inclusive Education, Art Education, Music Education, Physical Education

## Inclusive Education

The Inclusive Education specialization route offers a range of attitudes and skills, that are useful for all teachers. The two courses (EDU 466 Learning Disabilities and EDU 468 Special Needs in the Mainstream School) build on the introductory compulsory course EDU 311 Introduction to Inclusive Education, which is a prerequisite for the specialization route. The specialization route equips students with the theory of inclusive education, develops basic research skills and provides opportunities for hands on activities held in the Inclusive Education Lab. In particular, the students get acquainted with the literature about disability in Cyprus and abroad, they become critical thinkers and learn how to employ affective strategies for all learners. They are also taught how differentiated instruction can be intercoted in the planning and teaching (goals, means and materials, content, evaluation), they interact with people with disabilities and their families, and they are involved in developing or improving means and materials intended to facilitate learning for students with disabilities.

The specialization route of Inclusive Education is of interest to all students, primarily because it equips them with knowledge, attitudes and skills that will make them effective teachers. The added value of this specialization route is that, it opens a range of paths for future employment, while at the same time it prepares them for postgraduate studies, either at the University of Cyprus, or in other universities.

## Art Education

The Art Education courses (specialization area) offer opportunities to student teachers to engage through creative processes in teaching and learning the Visual Arts. The interdisciplinary character of Art Education courses enables participants to interact with various learning environments and incorporate artistic practices involving play, social engagement, visual thinking strategies and research, and the use of multiple mediums, objects and tools (including new technologies) in creating art. The participants are introduced to pedagogical learning in relation to the visual arts and are empowered to use art and imagination in conceptualizing a more creative and just society. The courses do not require special knowledge and abilities in the Visual Arts, but are opened to those who would like to incorporate art in their teaching practices (in several settings), or want to proceed to further studies in the field of Visual Art(s) Education.

## Music Education

The overall aim of music specialization courses is to provide a foundation of understanding the principles and processes of teaching and learning music in primary school. The courses are mainly laboratory based, focusing on music education activities and developing creative practices. The students acquire basic knowledge of music and creative expression skills, through the development of their own musical listening skills, performance and improvisation/composition. Students are expected to develop appropriate skills to support and guide music activities, based on the six core activities: movement, singing, listening to music, performance, improvisation and composition, reading and writing musical notation. Students are also expected to organize musical activities for specific ages and cognitive levels of primary school children, as well as implement teaching strategies that promote creativity in music education. Finally, they are trained to appreciate and support creative expression and aesthetic education for their students and themselves. Each lesson focuses on different areas:

1) EDU 444 Theory and Practice of Music; Creative Approaches to Basic Music Theory, Aural Training and Learning of a musical instrument (besides the recorder), i.e. Guitar. Knowledge ofrelevant digital technology (i.e. MuseScore, Audacity).
2) EDU 445 Contemporaty Trends in Music Education and Creative Approaches to Music Pedagogy; Listening, Improvisation and Composition in the Classroom. Procedures and strategies for teaching improvisation and composition in primary school. Study of appropriate musical compositions for the primary school and teaching approaches for developing music listening, as well as listening maps and relevant teaching materials. Basic principles of teaching music, organization and planning of music in primary school, practical applications.

## Physical Education

The specialization in Physical Education aims at providing students with the adequate knowledge and skills needed to teach quality physical education. The physical education courses focus on the current trends related to effective teaching of physical education. Specifically, the purpose of the specialization is to provide students the opportunities to learn and develop specific teaching skills related to quality teaching, by taking into account the most relevant theory developments in the field of Physical Education. Students are also provided with several opportunities to develop a personal philosophy of physical education.

This specialization includes two courses, which combine theory and practice. In particular, the purpose of the first course (EDU 456 Content of Physical Education), is to help students examine thoroughly the content of physical education in primary school. The second course (EDU 457

Methodology of Physical Education) reviews the effective pedagogical skills, that promote student learning and positive attitudes in physical education. The compulsory course (EDU 376 Physical Education in Primary School) is a prerequisite and aims at providing opportunities for students to gain a deeper understanding of the content and pedagogy of physical education in elementary school.

Specifically, students learn the goals and objectives, as well as the content of elementary physical education. They also study the developmental characteristics of the elementary school children, learn how to design and develop unit and lesson plans that maximize student learning, and develop effective teaching practices. In all three courses of the specialization, a strong integration of content and teaching practice is provided.

Furthermore, it helps students develop specific content and pedagogical knowledge, that will enable them to provide quality physical education programmes in elementary schools. Lastly, the specialization provides specific skills and knowledge for those students, who plan to continue graduate studies in the field of Physical Education Pedagogy either at the University of Cyprus or in other universities.

## Elective Courses

Primary school teachers and Pre-primary school teachers must complete at least 15 ECTS (three courses from two different faculties). According to the Senate's decision of the University of Cyprus only one course of the first level of foreign language can count as elective course. The students can either choose to take one course of the first level of foreign language or complete the second level of the same language. In this case, both levels can count as elective courses.

## Foreign Language

In addition to the above courses, students are required to complete at least 10 ECTS in a foreign language.

## OTHER PRIORITIES OF THE DEPARTMENT

- Establishing the Department in Cyprus, as well as in the rest of the Greek world and Europe. In order to fulfil this goal, the Department currently participates in joint research projects with other universities and international organizations, such as UNESCO, the Council of Europe, the European Union and the Commonwealth. In order to fulfil the same purpose, the Department organizes international conferences, lectures and seminars and the publication of a journal.
- Assisting and promoting school development. This goal will be fulfilled by offering in-service and staff development courses, educational interventions and through the guidance of school personnel in the introduction of new ideas in education.


## COURSE DESCRIPTIONS

## EDU 100 Olympic Education (6 ECTS)

The course emphasizes the principles of sport education and Olympism as a practical philosophy. Students learn and experience the ethical principles of Olympic Ideals, study key parameters of the Olympic Movement, acquaint themselves with Olympism and form attitudes aligned to Olympic Ideals. It emphasizes ancient and modern Olympic Games and Sports, and key forums e.g. International and National Committees and the Olympic Charter, and studies the history, organization, operation and spiritual content of the Olympic and other Games. The course also analyses Olympism and Olympic Education in their application to other disciplines.

## EDU 101 Theory of Education (6 ECTS)

The thematic axes of the course consist of (a) the Frerian critique of the banking model of education, (b) the postmodern critique of "grand narratives" and (c) the quest for theoretical and pedagogical interventions which cultivate critical thinking and empower students and teachers by offering them tools for re-building knowledge and activating their creative energies and potentialities.

In the context of the course we pursue the philosophical engagement with and rigorous exploration of the concepts of Socratic elenchus and aporia, dialogue, pedagogical eros, maieutics, the Deweyan definition of the educational value of experience and growth, the Frerian use of codification and de-codification of reality, Ranciere's reclaiming of emancipation. The relative (in Raymond Williams' cultural meaning of the term) autonomy of the pedagogical praxis and its role in the rebuilding of knowledge, social change and the mandate for emancipation are analyzed comparatively through a close reading of five theorists of education: Plato Rousseau, Freire, Arendt and Ranciere.

## EDU 102 Education during Infancy (0-3 years) (6 ECTS)

The students will study the theoretical aspects of infant development and education combining research and praxis. The course will be structured in a way, that will provide students with practical experiences with children of the ages from birth to three years. Different infant curricula will be analysed and the students will be guided to implement appropriate practices for the specific age group. There will be six visits of three hours of practicum in a child care setting.

## EDU 105 History of Education (6 ECTS)

What is history? Education in Europe since the Enlightenment and the rise of the nation-state. The invention of the grammar of modern schooling. Education, nation-building and national identity formation; education and industrialisation; education and national culture; education, state formation and patriotic citizenship. The
welfare state and the democratisation of education after World War II. Post-industrial and post-modern patterns of education: education for global economic competitiveness and global citizenship; European citizenship, multiculturalism and interculturality in education. The neoliberal state. Education in Greece after the establishment of the nation-state. Irredentism and the Great Idea in education. Church, orthodoxy and education. Reform and counter-reform in Greek education. Education in early colonial Cyprus (1878-1909). Education and colonialism. Ideology and the founding of the first public gymnasium (1893). The hidden curriculum of Greek-Cypriot schools (1900-1931). Enosis and education. British education policy and the conflict of identity (1931-1949). School history as conflict. Education in the first postindependent years (1959-1974). The education reforms of Sophianos (1976-1980). Education reform in the period 2004-2010. Education and ethnic conflict. Cyprus education as educational transfer. Cyprus curriculum today: historical reflections.

## EDU 118 Education and Gender (6 ECTS)

This course examines the formation of gender and sexual identities in the context of schooling. We look into issues such as gender socialization, gender and social class, gender stereotypes and the role of the media. Special attention is devoted to the relationship between school achievement and gender as this emerges through research findings from the last few decades. The course also examines how learning processes, school organization and discipline determine what is proper in terms of gender socialization and the expression of sexuality. The course examines all these issues through the lens of feminist thinking and its influence in educational systems.

## EDU 137 The Integration of Digital Technologies in PrePrimary School (6 ECTS)

The course's objectives are the following ones:
-The development of instructional design competencies for integrating digital technology in preprimary education classrooms.

- Understanding the relationships between learning theories, teaching approaches and educational technology.
- Evaluation of open and closed software programmes.
-The educational utilization of various educational tools, such as conceptual mapping tools, digital narrative software, simulation and educational robotics software and their educational affordances in teaching and learning.


## EDU 138 The Integration of Digital Technologies in Primary School (6 ECTS)

## The course's objectives are the following ones:

1. The development of technological pedagogical content knowledge.
2. The development of design thinking.
3. The integration of technology-enhanced learning activities into the curriculum of primary education.
4. Understanding the relationships between learning theories, teaching approaches and digital technology.
5. Evaluation of open and closed software programmes.
6. The educational utilization of various educational tools: concept-mapping tools, digital narrative software, simulation and educational robotics software and their educational affordances in teaching and learning.

## EDU 148 Educational Robotics (6 ECTS)

During the lectures, students are introduced to basic concepts and definitions of the educational robotics literature and develop computational thinking skills, such as algorithmic thinking, debugging, decomposition, abstraction and generalization.

In the lab, students learn how to build and program autonomous robotic devices, such as cars, animals and machines in order to solve authentic educational problems with the use of the Lego Mindstorms kit. They also learn about hardware (motors, sensors).

## EDU 158 Web 2.0 Tools (6 ECTS)

The basic aim of the course is for students to be able to use digital technologies confidently in a creative way and from a critical perspective, which is in line with the achievement of academic objectives, by placing an emphasis on five key areas: information, communication, content-creation, safety and problem-solving. The specific objectives of the course include the following:

- Develop students' skills for finding, creating, managing and sharing information through the use of various forms of digital content.
- Use of digital tools and technologies and recognition of their affordances according to the learning needs they are expected to meet.
- Assess the accuracy, relevance, reliability, format and accessibility of digital material in a critical way.
- Adapt the digital environment to the individual learning needs.
- Conduct safe Internet browsing and maintain a private profile in the digital world.
- Create a digital professional profile using the appropriate networks and technologies to promote knowledge and skills to potential employers.


## EDU 170 Pre-Math Concepts (6 ECTS)

Basic theoretical trends in Psychology concerning the development of pre-mathematical concepts in early childhood. The importance of language in the development of the first mathematical concepts. Critical analysis of the arithmetic of natural numbers. Investigation and in-depth study of basic mathematical concepts and
processes connected to the first mathematical concepts that children encounter and develop in the preschool years. Application of basic mathematical concepts and processes in scientific and everyday problems and activities in the kindergarten.

## EDU 171 Foundations and Fundamental Concepts of Mathematics in Primary Education (5 ECTS)

The structure of the course is based on the study of basic mathematical concepts which are essential in developing conceptual understanding as regards to the mathematics curriculum for primary school. Prospective teachers will study important curriculum concepts, such as number systems, algorithms of operations, the concept of divisibility and the Euclidean division, numerical and geometric patterns, sequences, key elements of Euclidean geometry and geometric transformations. The teaching approach is through the interconnection with the curriculum of primary school and the further deepening and study of relevant properties and theorems.

EDU 175 Natural Sciences in Pre-Primary School: Environment - Living Organisms (6 ECTS)

The main objective of the course is to give opportunities to students to explore the natural world and study its structure and functions and to appreciate the role of living and non-living things. The course teaches educational approaches suitable for pre-school age children. Emphasis is given on the implementation and critical discussion of outdoor educational activities, hands-on activities and inquiry learning

## EDU 178 Science, Technology, Society and Education (6 ECTS)

A critical (re)construction of the public understanding of science and educational implications. Culture as an outcome of innovation and development. Science as culture and the role of public understanding in promoting the social and cultural impact of science and technology. Education as a context for the dissemination of science and the integration of people in processes for scientific and technological innovation. Measures of public understanding of science. Education as a mediating process between science and society. Organizational structures for science at European level and the role of educational systems. Science and Society: science governance, ethics in science and professional practice, responsibility in research and innovation, equity in science and technology, access to research findings, the digital divide, engagement and participation. Science, Technology, Society and innovation processes in Cyprus. Education for foresight methodologies and their role in setting research priorities. The role of education in promoting scientific culture. Science Communication. The epistemic practice of argumentation. Evidence-informed decision making. Science and technology related journalism.

Note: The course places emphasis on developing skills in argumentative writing and in critical analysis of science and technology related media texts.

## EDU 185 Ecology and Environmental Education (6 ECTS)

The main objective of the course is to build studentsteachers capacity for teaching ecology and environmental education in the elementary school. This can be achieved by developing students' knowledge on teaching ecological and environmental issues and establishing connections between environmental knowledge and an environmental literacy and citizenship. The course focuses on the development of teaching skills concerning indoor and outdoor settings, action research and co-operative learning. Students also study childrens' alternative ideas on ecology and how they can deal with them from an educational point of view.

## EDU 201 Introduction to Philosophy of Education (6 ECTS)

The philosophical gravity of various educational ideas is assessed both historically and thematically, especially as those ideas have contributed to modern and postmodern conceptions of the educational shaping of subjectivity and society. The Presocratics, Plato, Aristotle, the rationalism of early modernity, the Rousseauist intervention in education, Kantianism, Nietzsche, the Frankfurt School and Freire constitute some of the material that this course covers. The course aims at developing students' critical thinking skills in order to be able to philosophize on educational issues.

## EDU 202 Early Childhood Pedagogy (6 ECTS)

Kindergarten as a social institution and its impact on the child's overall development. Emphasis is placed on the socio-emotional aspect of development, the relationship between children and adults, the rights and individualized needs of every child. Reference is made to the multiple roles of the early childhood teachers and their professional actions. An analysis of the teaching process in kindergarten and the organization of the environment along with the development of activities are explored.

## EDU 204 Methodology of Educational Research (6 ECTS)

The purpose of the course is to help students understand the basic concepts of educational research. Students will have the opportunity to write a research paper and criticize the quality of an educational research. Types of research projects, research stages, development of research instruments, data collection and methods of analysing the data, validity and reliability of measurements and the writing of a research paper will be presented.

## EDU 218 Sociology of Education (6 ECTS)

The course is an introduction to the basic concepts in Sociology of Education and aims to understand the role of teachers, schools and learning in a sociological framework. The course begins with an outline of the goals of Sociology
and Sociology of Education and their research approach in understanding sociological problems. A major part of the course explores the influence of functionalism and conflict theories in Sociology of Education as these have evolved since the 19th century. The course also addresses basic research lines in the field such as the role of class, ethnicity and gender in school performance and in the shaping of equal opportunities for all students.

## EDU 220 Theory and Methodology of Teaching (6 ECTS)

Conceptualizations of teaching and learning. Didactics as a scientific field of study. Genealogy of the field of General Didactics within the Education Sciences. Theoretical foundations of teaching within philosophical-pedagogical approaches and eclecticism. Lesson plan design as a problem-solving process and teacher professional autonomy in the classroom. Structure and content of lesson plans (aims and objectives, assumptions-student population, means and materials, children and classroom organization, course activities and forms of teaching, evaluation and assessment). Microteaching as a teacher professional development tool. Developing and enacting lesson plans, observing and reflectively discussing lessons. Discussing conceptualisations of teaching as "good" and "effective". Contemporary approaches to teaching and learning e.g. differentiation and individualization of teaching, cooperative learning, cross-curricular approaches, inquiry-based learning, teaching for developing metacognitive, critical and creative thinking

## EDU 221 Early Literacy (6 ECTS)

The purpose of the course is to familiarize preservice teachers with pedagogical knowledge on early literacy learning and, particularly, young children's transition to school literacy. Particular objectives include: (a) the understanding of key premises and principles of language development and emergent literacy; (b) the examination of teaching approaches to early literacy and literacy in the first grade; (c) the examination of early reading and writing instruction within the broader context of literacy teaching (communicative, functional, critical models) and with consideration of the pedagogical potentials of literature, multimodality, and digital literacies.

## EDU 222 The Teaching of Greek Language Arts (6 ECTS)

This course aims at providing future teachers with theoretical and methodological knowledge relevant to language arts education, with a special emphasis placed on the teaching of Greek and on literacy education at the primary grades. Specific objectives of the course include: (a) preservice teachers' familiarization with the particularities of language teaching in the Greek-Cypriot context; (b) the critical examination of different instructional approaches to teaching methodologies (including structural, skills-based, communicative, functional, and critical ones) with the ultimate goal of scaffolding participants to develop their personal
understandings of effective practices in language teaching; (c) the design of teaching and learning activities during language arts instruction to support the production and comprehension of written and oral texts. Secondary objectives include the identification of teaching practices for students' assessment and for the teaching Greek as a second language.

## EDU 223 Literacy in Early Childhood Education (6 ECTS)

The main purpose of the course is to facilitate preservice teachers' understanding of literacy as a meaning-making process and social practice that involves, among others, children's engagement with written text. Accordingly, the notions of text and early literacy are critically examined, while attention is paid to the different ways in which young children make meaning of texts and worlds in and out of school. Particular objectives of the course include: (a) the understanding of basic principles and premises of emergent and early literacy; (b) the examination of early literacy as multiple and multimodal; and (c) the critical analysis and the design of pedagogical frameworks that foster children's development as literacy learners in preprimary/kindergarten classrooms.

## EDU 224 Forms of Language Expression (6 ECTS)

The course offers students the opportunity to gain knowledge of the fundamental principles of language acquisition and development, as well as an understanding of how the language is used as a medium of interpersonal communication. The discussion in the first part of the course will revolve around the developmental stages for first language acquisition per level of linguistic analysis (the acquisition of phonology, morphology, syntax, semantics and pragmatics), while different theories of first language acquisition will also be discussed. The discussion on language as a medium for interpersonal communication and socialization will be framed within the speech acts theory. The second part of the course will discuss texts types and genres, principles of textualization, language variation and stylistics, with a special emphasis on oral texts. The last part of the course will be devoted to the presentation and implementation of methodological tools, including methods suggested by Gianni Rontari, for the design of language activities with a focus on oral production and comprehension that can be implemented in kindergarten classrooms.

## EDU 226 Structure of Greek Language (6 ECTS)

This course has a dual objective. On the one hand, it presents language under the scope of contemporary linguistics, focusing on the function of language as a communicative system and presenting the core levels of linguistic analysis for the Greek language (phoneticsphonology, morphology, syntax, semantics) from the perspective of contemporary grammar and from a diachronic/historical perspective. On the other hand, it discusses the teaching of grammar at school, examining
pedagogical approaches such as the structural-functional grammar approach, the communicative approach and the systemic functional grammar. The aim of this course is to combine contemporary linguistic analyses in the structure of language and contemporarary pedagogical approaches in language arts for the Greek language.

## EDU 229 School Experience in Primary School I (6 ECTS)

The main purpose of the first phase of the School Practicum programme is the implementation and interaction of student teachers with real school learning environments with an emphasis on instructional design procedures. The course's objectives are the following ones:

- Develop students' general and specific skills in instructional design procedures (in several domains).
- Implement learning objectives and learning activities in their lesson planning, which must be consistent with the real learning environments which they are placed.
- Apply pedagogical principles in their lesson planning.
- Implement a reflective stance towards a series of instructional procedures observed.
- Apply reflective practices during their lesson planning through the conduction of focused classroom observations


## EDU 238 Design and Technology (6 ECTS)

The course prepares students to take on the challenges of teaching a range of design and technology subjects across curriculum. It also provides a strong theoretical foundation for the study and practice of design and technology across a variety of media and technologies. The focus of the study will be on the design process, including the practical manipulation of materials and systems designs within the context of contemporary technologies.

## EDU 239 School Experience in Pre-Primary School I (6 ECTS)

This course represents the first phase of the Programme of School Experience in pre-school. Its purpose is to introduce students to the content of pre-school education and provide them with experience and knowledge concerning the institution of pre-school education.
Specifically, the following topics will be studied:
-The evolution of pre-school education in the history of Cyprus.
-The basic cognitive areas of the pre-school curriculum.
-The operation of kindergarten: organization and administration of the school unit.
-The programming of the pre-school teacher: short-term planning/course plan.
-The feedback process of teaching.
-The content of Language Education and Social Studies: fairy tales.

- Free and/or Structured Play.
-The outdoor play
- Observation and evaluation in kindergarten: ways and methods of observation, interpretation.
-The communication in kindergarten.
- Effective kindergarten: characteristics and suggestions.
- Professionalism and ethics in pre-school education.

EDU 252 Art Education in Pre-primary School (5 ECTS)
Theoretical studies emphasizing the social, affective and cognitive dimension of art and its' relation to early year's education. Introduction to Visual Arts Language through engagement in creative processes and art play. Young children's artistic development: Making and viewing. Planning and designing play-based art activities for young children in early childhood settings.

## EDU 258 Music Education in Pre-primary School (6 ECTS)

The purpose of this introductory course is to help students acquire musical knowledge as well as to develop their musical skills, values and attitudes through experiential musical activities. Students will be trained through performance, listening, improvisation and composing activities.

## EDU 286 Natural Sciences in the Primary School: Physical and Chemical Phenomena and Transformations (6 ECTS)

Physical and chemical phenomena and changes. States of matter and their structure and properties. Changes of state of matter. Physical and chemical phenomena. Forces, forms of energy, transfer and transformations of energy. Heat, sound, light, magnetism and electricity, their sources, transfers and effects. Emphasis on methods and processes of science and experimental study of phenomena.

## EDU 304 Student Assessment in Primary School (6 ECTS)

The course aims at:

- Familiarizing students with the basic terminology of educational evaluation/assessment, the basic types of educational evaluation/assessment, and the basic summative and formative techniques of assessing student knowledge, attitudes, and skills.
- Giving students the opportunity to develop, analyse and evaluate the tools which are used for student assessment in primary school education.
- Familiarizing students with different ways of presenting and communicating the findings emerging from assessing student learning, and using these results for decisionmaking related to teaching methods and lesson plans.


## EDU 305 Student Assessment in Pre-primary School (6 ECTS)

The main aim of this course is to familiarize students with issues related to student assessment in pre-primary education. Students will have the opportunity to address issues related to assessment methods, instruments, problems and practices of assessment of student performance. Emphasis will be given to methods of oral assessment, performance assessment, developing portfolios, conducting and recording of classroom observations and establishing baseline assessment mechanisms. Students will also learn the basic terminology of educational assessment and the framework in which it may be implemented, as well as the main purposes of assessing student performance, attitudes/beliefs, and skills.

## EDU 311 Introduction to Inclusive Education (6 ECTS)

The course engages student teachers with the theoretical and legislative framework of educating students with disabilities in Cyprus and abroad, and it offers opportunities for the development of critical thinking skills and positive attitudes about disability and diversity issues. Student teachers are expected to know the underlined principles of the philosophies around the education of students with disabilities (segregation, integration, inclusive education), the fundamental models of disability explaining the construction of the concept, the historical, psychological, sociological, legislative, and pedagogical aspects of inclusive education, and the current law about the education of students with disabilities in Cyprus, and the implications stemming from its implementation. Student teachers are encouraged to revisit any prior views and stereotypes about disability, and develop positions and attitudes that are parallel with the theoretical framework of inclusive education and human rights.

## EDU 325 Creative Drama (6 ECTS)

The course aims to:

- Explain what Creative Drama in education is.
- Describe the objective of Creative Drama as well as its characteristics.
- Make a reference to Creative Drama's origins as well as its developments in education.
- Report the similarities and differences between Creative Drama and Theatre.
- Report the value and benefits of Creative Drama.
- Experience Creative Drama Techniques and Strategies.
- Name and describe the most important Creative Drama techniques.


## EDU 329 School Experience in Primary School II (6 ECTS)

The main purpose of the second phase of the school practicum programme is to put into practice what students
have learned in real school learning environments. The main learning objectives are for students to:

- Apply their theoretical framework into practice at all levels of instruction (instructional design, teaching and evaluation/reflection).
- Establish communication and collaboration with fellow student teachers, mentors, instructors and the teaching personnel of their schools.
- Observe, analyse and reflect on the learning procedures, which are connected with instructional practices in the context of classroom discourse in several domains.
- Apply reflection practices and effective teaching skills in real classrooms.


## EDU 331 Didactics of Mathematics (6 ECTS)

The course aims to help the students to:

- Develop and understand the basic principles of mathematics teaching and learning, and the elementary school mathematics curriculum.
- Develop and understand the teaching approaches and methods for mathematical concepts from number, geometry, measurement, statistics, probability and algebra.
- Understand the importance of developing mathematical practices.
- Understand the role of the teacher in the classroom and his/her contribution to the development of an effective learning environment for mathematics teaching.


## EDU 332 Mathematics Education in Pre-Primary School

 (6 ECTS)The course aims at helping students become acquainted with the objectives of mathematics in pre-primary education, the content of mathematics for the kindergarten and the first grades of the primary school, the teaching methods of the subject as they have developed in recent years, the teaching aids, and the contemporary methods of evaluating the mathematical ability of pupils. At the same time, the course will examine the fundamental psychological theories, as they concern the development of primary mathematical concepts in pre-primary school children.

## EDU 333 Academic Discourse: Critical Analysis and Production (6 ECTS)

The course aims at developing students' critical and academic literacies through the analysis and production of academic texts. Its main purpose is to help students gain an understanding of academic writing as a literacy practice and genre with specific linguistic and cognitive demands, textual conventions and rhetorical choices, that differ from school texts and everyday social interactions. Attention is given to the study of Greek language phenomena at a
phonological, morphological and syntactical level and the ways these construe academic text and discourse.

## EDU 334 Digital Technology in Mathematics Teaching (6 ECTS)

The course's objectives are for students to be able to:

- Use digital media to teach mathematics at elementary school.
- Explore ways to effectively integrate digital media into mathematics teaching
- Explore how the integration of digital media into mathematics teaching affects students'learning processes and development of mathematical thinking.


## EDU 336 Science Teaching Methods (6 ECTS)

This course aims at promoting student teachers' understanding about how primary school students construct, acquire and inquire science knowledge. In addition, the student teachers will be introduced to conceptual understanding and change theories in order to understand how students' naïve ideas emerge. Moreover, the course will develop student teachers' teaching skills and how to design appropriate lessons for their primary school students. Modern teaching theories, pedagogies and strategies, as well as recent research findings from the domains of science education and cognitive psychology will be introduced. A great emphasis will be placed on inquiry as a teaching method, as well as on the science method and thinking skills associated with it. Finally, the teachers will be requested to design and implement their lessons in an attempt to put theory into practice.

## EDU 339 School Experience in Pre-Primary School II

 (6 ECTS)This course represents the second phase of the Programme of School Experience in pre-school. Its purpose is to familiarize students with the context and procedures of pre-school settings. Students are expected to acquire knowledge and experiences regarding planning and conducting teachings as well as implement the various roles that a pre-school teacher has.

## EDU 341 Theology and Religious Education (6 ECTS)

The course aims to help the students to learn: a) the teaching of Orthodox Church and of great religions; b) the place and the learning process of Religious Education in Primary Schools.

God, human beings and nature: Christian and other religions views of the relationship of human beings with God, themselves, their fellow humans, and nature. The religious phenomenon. Religious Education in Public Education. Aims, principles, methodology, evaluation of Religious Education. Curricula, school textbooks, teaching media, educational technology. Modern challenges for Religious Education.

## EDU 343 Geography and its Didactics (6 ECTS)

Students learn to:

- construct foundational geographical concepts which frame the geography curriculum for elementary education,
- enact the basic skills of geography teaching and education.


## EDU 348 Social Issues in Pre-primary Schools (6 ECTS)

The course aims to familiarize students with various social issues that affect the life of the children of Pre-primary Education and effective pedagogical methods that can be used in teaching.

Self: the psychosomatic dynamism of human beings. Coordination and cultivation of the mental world. Development, creativity, art. Fellow humans: interpersonal relationships: uniqueness, equality, unity. Identity and diversity. Parenthood, childhood, brotherhood, friendship. Language, gender, race, religion, ethnicity. Environment: relationships with animals and things. Disease, death, mourning. Transcendent and meaningful life.

## EDU 351 Art Education in Primary School (6 ECTS)

Theoretical studies emphasizing the affective, social cultural and cognitive dimension of Art and its role to Education. Introduction to visual language through engagement with materials, ideas, images and artistic processes. Form and Meaning of art works. Children's Art: characteristics, strategies and practices. Art Curriculum, learning approaches and strategies. Development of art activities.

## EDU 352 Teaching Art in Pre-Primary School (6 ECTS)

 The cultural, aesthetic and educational dimension of Art. Art practices engaging students in creative processes and art play. Creativity and the creative process: creative thinking tools and artistic processes in art. Pedagogical approaches, methods, art and curriculum in pre-primary school. Developing art activities for young children.
## EDU 363 Music Education in Primary School (6 ECTS)

## The course aims at:

- Developing students' musical skills such as vocal skills and listening skills.
- Learning a basic repertoire of songs suitable for primary school.
- Learning about musical instruments and the techniques used in performing classroom percussion instruments.
- Acquiring basic knowledge of contemporary musical pedagogical approaches and the collection and development of appropriate teaching material.
- Developing students' creativity through teamwork focused on specialized musical themes.


## EDU 368 Teaching Music in Pre-Primary School (6 ECTS)

The course aims at systematic and in-depth analysis of the listening, improvisation and music composition activities. Students learn basic techniques of improvisation and composing. In addition, students are expected to further develop their vocal skills as well as their instrumental performing. Finally, students are expected to put into practice all of the above by using appropriate teaching methods for the pre-primary school students.

## EDU 369 Play: Learning and Development (6 ECTS)

The purpose of this course is for students to examine the different pedagogical aspects of the role and importance of play, in the development and learning of children from infancy to kindergarten. More specifically, the different theories and types of play will be presented. Students will investigate/explore and study the role of the early childhood teacher in supporting children's play, and the different ways play can be incorporated in the daily schedule at kindergarten. Finally, students will enhance their knowledge and understanding of the benefits of play in education, through different role playing activities and thus experience the feelings that one gains through play.

## EDU 376 Physical Education in Primary School (6 ECTS)

Study of the content, curriculum, and effective teaching skills appropriate for the elementary school. Analysis of teaching methods and approaches of physical education in the elementary school. Study and implementation of principles of motor learning (movement education), effective instructional and managerial skills, unit and lesson planning, and observation of systems of instruction in elementary education. Emphasis is placed on the understanding, analysis, application and harmonization of effective teaching skills, with the content of physical education in elementary school.

## EDU 377 Physical Education in Pre-primary School (6 ECTS)

Study of the content of physical education in preschool education. Emphasis is placed on the understanding, analysis and application of the content of physical education in preschool education. Study and application of movement skills appropriate for children of preschool age.

## EDU 390 History and its Didactics (6 ECTS)

The first part of the course deals with history as a way human societies relate with the past. In this context issues related to the nature of historical knowledge and the processes of its construction are discussed. Furthermore, the role of history in how individuals and groups perceive their own place in the past, the present and the future is discussed. The second part of the course examines different approaches in history education, the debates about the place of history in education and also research evidence related to teaching and learning in history. It also discusses how curriculum, textbooks and other educational
materials relate to different ideas about history education. The last part of the course focuses on the development of historical literacy (development of substantive knowledge and disciplinary understanding) and also on practical issues related to the teaching of history in primary education (design and teaching of history lessons, development and use of teaching materials, assessment, museums and places of historical interest).

## EDU 391 English Language Instruction (6 ECTS)

This course will examine the following areas:
-The development of key approaches, methods, and techniques in the field.

- Teaching receptive skills to young learners.
- Teaching passive skills to young learners.
-Teaching grammar and vocabulary to young learners.
-The value of bilingualisms/multilingualism to young learners.
- Material design and development.
- Lesson design and planning.
-The role of technology in teaching young learners.
- Language assessment.


## EDU 392 Conducting Critical Synthesis of Critical Studies and Reporting Findings (6 ECTS)

The purpose of the course is to familiarize students with scientific articles, their genres and the main elements that separate them from other genres. In this context students will learn about the main parts of an article, the valuation method and how to critically review the literature presented to them. They will be familiarized with the databases as an indispensable tool for retrieving articles. It is also considered necessary for students to be familiarized with the referencing system, with a particular emphasis on APA Style which is a prerequisite for the proper compilation of university-level paper, as well as to practice the APA style which is also used by their Faculty. Students will have the opportunity to get acquainted with the different types of research methodology and will focus on the importance, role and main features of meta-analysis and its steps of conducting a meta-analysis. Finally, students will be required to write a bibliographic review.

## EDU 394 LGBTQ Issues, Youth and Education (6 ECTS)

The course combines gender studies, sexuality studies and queer theory. It addresses the ways heteronormativity is enacted as homophobia. Across the public sphere, the family, youth groups and schools the heteronormative hypothesis burdens unequally LGBTQ youth. They often experience intersecting forms of gender violence, exclusion in isolation and silence, and find themselves in positionalities and under conditions of exclusion.

Concepts and special issues addressed in the course include: heteronormativity, male homosociality, homophobia, various sorts of debates about the introduction of LGBTQ sex education, visibility politics with particular reference to pride parades, normalization, etc. Course material include academic papers (in English and Greek), samples of national and international press and social media, samples of sex education, biology and health education curriculum, documentaries and movies.

## EDU 401 Educational Ideals and their Philosophical Grounding (6 ECTS)

Given that all educational practices presuppose some sort of interpretation of the self and the world, the course examines implicit assumptions about the subject of knowledge, the relation of knowledge and power, the transmittable cognitive material (e.g. hegemonic discourses), rational thinking, and school and society. The course will be thematic and will enrich future teachers' theoretical background.

## EDU 403 Comparative Education (6 ECTS)

The core themes of CE include educational relationships: 'system','transfer,' 'space,' 'time', 'state,', 'context', 'culture', 'identity'. Deconstructing entrenched ideas, such as CE compares countries and systems, looking for similarities and differences. Globalization, internationalization, Europeanisation, democratisation, colonialism, neoimperialism and their educational codings. The role of international development agencies (e.g. UNESCO, World Bank, OECD) and non-governmental organizations in global and local education. The dialectic of the global and the local. European education policy and national translation. New trends in international education (school autonomy, parental choice, accountability, benchmarking, educational markets, and so on). The 'Finnish model', the Prussian and Soviet models: the promises and perils of comparison. The use and abuse of CE . The relationship of CE to education policy and reform. The importance of CE for a small state like Cyprus. Cyprus education as a product of foreign influence.

## EDU 404 Curriculum Development (6 ECTS)

Basic terminology, types and categorizations of curriculum and of currere. Official curricula, educational policy, school curricula and timetables. Curricula as political, social, cultural texts and in context: critical analysis of official curricula from Cyprus, other countries and various institutions/bodies. Models of developing and implementing curricula at the micro and macro-level: philosophical orientations, aims and objectives; selection and organization of content; teaching approaches and learning activities; evaluation. Curriculum evaluation: approaches and models; Curriculum development and teacher professional identity: teachers as reflective professionals, as researchers, as scientists, as artists. Curriculum reform, review, change and innovation. The
hidden curriculum. School textbooks, educational materials and curricula.

## EDU 412 Organization and Administration of the Educational System (6 ECTS)

The educational system and the development of educational theory. Concepts and theories related to leadership, motivation, decision making, communication, etc. Educational administration topics in the Cyprus context. The structural characteristics of the Cyprus educational system and the main problems that relate to it. Contemporary trends in educational administration.

## EDU 422 Greek Language Instruction II (6 ECTS)

The objective of this course is the critical approach and the in-depth understanding of core issues in language arts; special emphasis is placed on theoretical principles and practical implementations. In particular, the course aims at putting together contemporary approaches from language arts (critical literacy, genre-based literacy) and principles from the area of educational linguistics and non-formal education, in order to prepare the students to create and design tasks and units in the wider context of literacy as a social practice.

## EDU 424 Multimodality and Multiliteracies (6 ECTS)

The main purpose of the course is to familiarize future teachers with the ways in which language, texts, and literacy are shaped in a constantly changing environment. Specific objectives include: (a) the examination of the ways in which the notion of literacy is redefined in the context of new understandings of its complex and multifaceted nature, and in the emergence of new media and technologies; (b) the analysis of the notion of multimodality with an acknowledgement of the intersection of different semiotic modes and non-linguistic signs in meaning-making processes; (c) the familiarization and employment of pedagogical frameworks, including the pedagogy of multiliteracies, which has been developed in response to the multimodality of modern texts and the increasing diversity of social contexts.

## EDU 429 School Experience in Primary School III (20 ECTS)

The main purpose of the third phase of the school practicum programme is to give students an opportunity to apply their pedagogical knowledge and skills and at the same time to gain experience in the primary school environment. Additionally, the programme aims at developing students' confidence at the beginning of their careers as teachers. The main objectives for the students are to:

- Observe school reality at all levels (instructional, operational, administrational, etc.) in order to understand the problems and the difficulties and how to deal with them.
-Teach different contexts in several domains and attend all levels of instruction: designing, teaching and reflecting/evaluating results.


## EDU 435 Teaching Natural Sciences in Pre-Primary School (6 ECTS)

The course helps students to:

- Develop familiarity with a variety of approaches to teaching and learning in the Kindergarten with emphasis on helping children to enrich their experiences with natural phenomena and interact verbally using observation an experimentation as a starting basis.
- Acquire experience with interaction with children in the early years in the context of activities relating to the natural and artificial environment.
- Develop self-confidence in selecting and enacting activities with emphasis on free exploration of natural phenomenal and on developing the attitudes and practices that are characteristic of the sciences.
- Develop an interest in observing children and collecting information on their individual development learning and also working in groups.


## EDU 439 School Experience in Pre-Primary School III (20 ECTS)

The purpose of the course is to enrich students' experience and develop their skills in order to practically interpret pedagogical theories and transform the content of various curriculum subjects, in order to successfully employ the multiple roles of an early years' teacher.

## EDU 444 Theory and Practice of Music (6 ECTS)

The study of the basic elements of music through a theoretical, auditory and practical approach. More specifically:
a) Study of notation, melodic, rhythmic and expressive musical elements. Diatonic scales, intervals, chords, structure of music (phrase, period, part, forms).
b) Basic knowledge of instrumentation.
c) Development of students' audiation and listening skills, based on the understanding of rhythm and structure of melody.
d) Introduction to techniques of orchestration (children's songs and instrumental pieces).
e) Learning a second instrument (Guitar/Metallophone).
(f) Developing students' vocal and conducting skills.
g) Use of appropriate software (e.g. MuseScore, Audacity).

EDU 445 Contemporary Trends in Music Education and Creative Approaches to Music Pedagogy (6 ECTS)

An introduction to basic philosophical, sociological and psychological dimensions of music pedagogy and, in general, new trends for music teaching. The course examines the following issues:
-The main musical pedagogical approaches and their practical applications in primary school.

- Emphasis is placed on the music curriculum.
- Essential principles of teaching music, organization and design of the music lesson are examined.
- Processes and techniques for teaching improvisation and composition in primary school.
- Appropriate music compositions for primary school (Repertoire and Listening Maps).
- Pedagogical approaches of developing the listening skills.

EDU 452 Contemporary Trends in Art Education (6 ECTS)
The role of contemporary art in society and its relation to culture and the environment. Meanings and functions of images in contemporary culture and the role of visual culture in art education. New technologies (e.g. digital photography and/or video art) in art and new approaches. Methods and strategies for art learning in and out of school (e.g. Museums and Galleries, Natural Settings and Public Spaces).

## EDU 453 Art Education and Pedagogy (6 ECTS)

Art practices and theories concerned with interdisciplinarity, creativity, play and participatory art practices. Art Curriculum pedagogical principles, approaches, methods and strategies. Development of ideas, educational material and art activities appropriate for children in primary schools.

## EDU 456 The Content of Physical Education (6 ECTS)

The course helps students to understand and examine closely the content of physical education in the primary school. Emphasis is placed on the practical application of the content.

## EDU 457 Methodology of Physical Education (6 ECTS)

The course examines pedagogical effective skills of teaching in physical education; study of learning principles, effective approaches, teaching methods; planning and evaluation/assessment of student outcomes; analysis and application of ways of extending the programme of physical education and incorporation of elements of professionalism in the lesson; methods that promote academic learning and development of positive attitudes and experiences for all children.

## EDU 466 Learning Disabilities (6 ECTS)

This course is addressed to students who have already completed the introductory course entitled EDU 311 Introduction to Inclusive Education. It is one of the three courses of the specialization route of Inclusive Education, but at the same time, it is also offered as an elective for students of Pre-Primary and Primary Education who are not enrolled in the specialization route of Inclusive Education. The course addresses the basic issues of learning disabilities (such as definitions, characteristics, assessment for teaching purposes and teaching techniques) and it focuses on developing skills for differentiation in the mainstream school class.

## EDU 467 Difference and Exclusion (6 ECTS)

This course, the last of the specialization in Inclusive Education, places a special emphasis on the self-image of the different child/person, and also on the relationship between his/her family and school. It aims to assess how this relationship between home and school can influence the child's educational process. In order to achieve that, academic and literary texts are used.

## EDU 468 Special Needs in the Mainstream School (6 ECTS)

The course's main goal is to cover in depth matters of theory, policy and practice which have been examined in the compulsory introductory course. The course structure deals with the legislation, the policy and the decision making at a state level, as well as the praxis at school level. To this effect we examine the main axes which influence Inclusive Education: the disabled person him/herself, the parents, the teachers, the peers, society and church. The course ends with a question about the future of Inclusive Education in Cyprus and internationally in the context of the global village.

## EDU 473 Didactic of Numbers and Algebra in the Primary School (6 ECTS)

The course gives emphasis on the ways of connecting arithmetic and algebra concepts in primary school by examining ways of algebrafying arithmetic. In addition, students will review teaching models, representations and practices used in the teaching of basic concepts in numbers and algebra. In particular, emphasis will be given on (a) contemporary teaching practices of natural numbers (examining the multiple concepts of numbers), (b) integers and teaching models of introducing negative numbers and (c) the need to extend numbers in primary school from the set of integer numbers to the set of rational numbers (fraction concept, decimal numbers, percentage and ratio, operations with rational numbers). Prospective teachers will examine the conceptual and algorithm approach of operations, ratios, percentages, proportional problems, divisibility concepts and the dimensions of algebraic thinking in primary school.

EDU 474 Critical, Creative Thinking and Assessment in Mathematics (6 ECTS)

The course will explore current approaches of critical and creative thinking in mathematics as well as ways in which these abilities can be developed through mathematics learning. In addition, prospective teachers will study current trends in mathematical problem solving and problem posing with particular emphasis on the development of mathematical reasoning, critical thinking and creativity. Furthermore, the course will focus more on students' assessment and on ways of incorporating assessment activities during teaching, by utilizing basic principles of formative assessment.

## EDU 481 Christian Ethics and Modern World (6 ECTS)

The course aims at helping students to understand Christian Ethics with regards to the main existential questions of human being and the great problems of the modern world.
a) Orthodox Theology: God, human beings, nature. The social dimension of the Church. The moral development of human being. Self-knowledge, sociability, physical theory. Education, art, technology. Politics, economy, work. Peace, justice, war. Globalization. Genetics, illness, death, resurrection.
b) Love, eros, sexuality. Conjugation. Parents and children. Marriage, community, society. Androcentrism, sexism. Feminism. The family today. Sexual education.

## EDU 487 Teaching Physical education in Pre-Primary School (6 ECTS)

The course examines pedagogical effective skills of teaching in physical education in early childhood education; study of learning principles, effective approaches, teaching methods; planning and evaluation/assessment of student outcomes; analysis and application of ways of extending the programme of physical education and incorporation of elements of professionalism in the lesson; methods that promote academic learning and development of positive attitudes and experiences for all children in early childhood education.

## EDU 488 Contemporary Dimensions of Biology Education (6 ECTS)

The objective of this course is to familiarize students with current educational approaches in the teaching of Ecology and Biology. Participants study common misconceptions on environmental and biological topics and discuss ways of incorporating them into teaching sequences. The course gives emphasis on the exploration of teaching approaches especially relevant to Ecology and Biology Education, such as long-term experimental settings, field trips and outdoor studies, modelling and virtual learning environments.

Finally, the course aims at giving to students a critical stance towards socio-scientific issues, nature of science issues and of ethical and social parameters of scientific practice.

EDU 489 Computer Science Applications and Modern Trends in Science Teaching (6 ECTS)
This course aims at introducing and familiarizing prospective teachers with ICT tools that have the potential to materialize and support learning in natural sciences. These ICT tools include communication tools, collaboration tools, data management and analysis tools, control of mechanisms and measurement tools, as well as computer programming environments for creating simulations, animations and models in general. Another objective of the course is to introduce and familiarize student teachers with digital games and enable them to understand their potential as means for learning science. Students are expected to (i) devote time in learning and familiarizing themselves with each ICT tool, (ii) explore the potential added value of each tool in children's learning in the natural sciences and (iii) integrate each tool in their curriculum and teaching materials. A third objective of the course is to have student teachers situate the aforementioned ICT tools in the constructivism and inquiry paradigm. The idea is to show to prospective teachers how to provide guidance and proper scaffolding to their students when enacting constructivist, inquiry-based learning activities in science class.

## SEMINAR - SENIOR THESIS

EDU 490 Seminar - Senior Thesis I (6 ECTS)
Planning and executing a study on a topic relevant to Education Sciences, under the guidance and supervision of a faculty member of the Department. The study may be based on empirical evidence and/or on a literature review.

## EDU 491 Seminar - Senior Thesis II (6 ECTS)

Planning and executing a study on a topic relevant to Educational Sciences, under the guidance and supervision of a faculty member of the Department. The study may be based on empirical evidence and/or on a literature review.

Note: Students who choose to complete a Seminar Thesis, are exempted from two elective courses from any area of the programme of studies.

## TABLE A: PROGRAMME OF STUDIES FOR PRIMARY SCHOOL TEACHERS

## FIRST AREA: PEDAGOGICAL SCIENCES (47 ECTS)

 Compulsory Courses (29 ECTS)EDU 101 Theory of Education 6
EDU 105 History of Education
6
EDU 218 Sociology of Education
6
EDU 311 Introduction to Inclusive Education
PSY 170 Education Psychology I: Child Development and Educational Application

## Elective Courses (18 ECTS)

(choose three courses from the following)
EDU 118 Education and Gender
EDU 201 Introduction of Philosophy of Education 6
EDU 401 Educational Ideals and their Philosophical Grounding

EDU 403 Comparative Education

6

EDU 404 Curriculum Development
EDU 481 Christian Ethics and Modern World
PSY 101 Developmental Psychology I
Note: Students who choose the course PSY 101, will be credited with 1 ECTS less, so they will have to register to one extra course or attend seminars offered by the Academic Affairs and Student Welfare Service.

## SECOND AREA: CONTENT AREA STUDIES (34 ECTS)

## Compulsory Courses

EDU 138 The Integration of Digital Technologies in Primary
Education
EDU 171 Foundations and Fundamental Concepts of Mathematics in Primary School
EDU 226 Structure of Greek Language
EDU 286 Natural Sciences in the Primary School: Physical and Chemical Phenomena and Transformations
CS 002 Introduction to Computer Science
MAS 051 Statistical Methods

## THIRD AREA: TEACHING METHODOLOGY, EVALUATION AND RESEARCH (78 ECTS) Compulsory Courses

Research and Teaching Methodology Courses (18 ECTS)
EDU 204 Methodology and Educational Research
EDU 304 Student Assessment in Primary School
EDU 220 Theory and Methodology of Teaching

## Teaching Courses (48 ECTS)

EDU 221 Early Literacy
EDU 222 The Teaching of Greek Language Arts
EDU 331 Didactics of Mathematics

## EDU 336 Science Teaching Methods

6EDU 341 Theology and Religious Education ..... 6
EDU 351 Art Education in Primary School ..... 6

EDU 376 Physical Education in Primary School
6

## Elective Courses (12 ECTS)

(choose two course from the following)
EDU 185 Ecology and Environmental Education 6
EDU 238 Design and Technology 6
EDU 334 Digital Technology in Mathematics Teaching 6
EDU 343 Geography and its Didactics 6
EDU 390 History of Education 6
EDU 391 English Language Instruction 6
EDU 412 Organization and Administration
of the Educational System

## FOURTH AREA: SCHOOL EXPERIENCE (32 ECTS) School Experience

EDU 229 School Experience in Primary School I 6
EDU 329 School Experience in Primary School II 6
EDU 429 School Experience in Primary School III 20
FIFTH AREA: SPECIALIZATION (24 ECTS)
Specialization Courses A (12 ECTS)
(choose one area)

## Greek Language

EDU 422 Greek Language Instruction II 6
EDU 424 Multimodalities and Multiliteracies 6
Mathematics
EDU 473 Didactics of Numbers and Algebra in the Primary
Education
EDU 474 Critical, Creative Thinking and Assessment in
Mathematics
Science Education
EDU 488 Contemporary Dimensions of Biology Education 6
EDU 489 Computer Science Applications and Modern Trends in Science Teaching
Specialization Courses B (12 ECTS)
(choose one area)
Inclusive Education
EDU 466 Learning Disabilities 6
EDU 468 Special Needs in the Mainstream School 6
Physical Education
EDU 456 The Content of Physical Education 6
EDU 457 Methodology of Physical Education 6
Music Education
EDU 444 Theory and Practice of Music 6
EDU 445 Contemporary Trends in Music Education
\& Creative Approaches to Music Pedagogy

## Art Education

EDU 452 Contemporary Trends in Art Education 6
EDU 453 Art Education and Pedagogy 6

SIXTH AREA: ELECTIVE COURSES AND
COURSES OF FOREIGN LANGUAGE (25 ECTS)
-Three Elective Courses (from two different faculties)
-Two Courses of Foreign Language

SEMINAR-SENIOR THESIS (12 ECTS)
EDU 490 Seminar-Senior Thesis I
EDU 491 Seminar-Senior Thesis II

Students who choose to compete a Seminar Thesis are exempted from two Elective Courses.

TOTAL ECTS FOR THE PROGRAMME OF STUDIES FOR PRIMARY SCHOOL TEACHERS

| Area of Studies | Compulsory | Department Electives | Free Electives | ECTS |
| :---: | :---: | :---: | :---: | :---: |
| FIRST AREA: PEDAGOGICAL SCIENCES | 29 | 18 | - | 47 |
| SECOND AREA: CONTENT AREA OF STUDIES | 34 | - | - | 34 |
| THIRD AREA:TEACHING METHODOLOGY, EDUCATION AND RESEARCH | 66 | 12 | - | 78 |
| FOURTH AREA: SCHOOL EXPERIENCE | 32 | - | - | 32 |
| FIFTH AREA: SPECIALIZATION |  |  |  |  |
| SPECIALIZATION B | 12 | - | - | 12 |
| SIXTH AREA: |  |  |  |  |
| FREE ELECTIVE COURSES | - | - | 15 | 15 |
| FOREIGN LANGUAGE COURSES | 10 | - | - | 10 |
| TOTAL | 195 | 30 | 15 | 240 |

## TABLE B: PROGRAMME OF STUDIES FOR PRE-PRIMARY SCHOOL TEACHERS

FIRST AREA: PEDAGOGICAL SCIENCES (47 ECTS)Compulsory Courses (29 ECTS)
EDU 101 Theory of Education6
EDU 202 Early Childhood Pedagogy ..... 6
EDU 218 Sociology of Education ..... 6EDU 311 Introduction to Inclusive Education6
5
Elective Courses (18 ECTS)(choose three courses from the following)EDU 105 History of Education6
EDU 118 Education and Gender ..... 6
EDU 201 Introduction to Philosophy of Education ..... 6
EDU 403 Comparative Education ..... 6
EDU 404 Curriculum Development ..... 6
EDU 466 Learning Disabilities ..... 6
SECOND AREA: CONTENT AREA STUDIES (58 ECTS)
Compulsory Courses
EDU 137 The Integration of Digital Technologies inPre-Primary School6
EDU 170 Pre-Math Concepts ..... 6
EDU 175 Natural Sciences in Pre-Primary School: Environment-Living Organism ..... 6
EDU 224 Forms of Language Expression ..... 6
EDU 252 Art Education in Pre-Primary School ..... 6
EDU 258 Music Education in Pre-Primary School ..... 6
EDU 348 Social Issues in Pre-Primary Schools ..... 6
EDU 377 Physical Education in Pre-Primary School ..... 6
CS 002 Introduction to Computer Science ..... 5
MAS 051 Statistical Methods5
THIRD AREA: TEACHING METHODOLOGY, EVALUATION AND RESEARCH (78 ECTS)
Compulsory Courses
Research and Teaching Methodology Courses (18 ECTS)
EDU 204 Methodology and Educational Research ..... 6
EDU 220 Theory and Methodology of Teaching ..... 6
EDU 305 Student Assessment in Pre-Primary School ..... 6

## General and Special Teaching Courses (54 ECTS)

EDU 102 Education during Infancy (0-3 years) 6
EDU 223 Literacy in Early Childhood Education 6
EDU 325 Creative Drama 6
EDU 332 Mathematics Education in Pre-Primary School 6
EDU 352 Teaching Art in Pre-Primary School 6
EDU 368 Teaching Music in Pre-Primary School 6
EDU 369 Play: Learning and Development 6
EDU 435 Teaching Natural Sciences in Pre-Primary School 6
EDU 487 Teaching Physical Education in Pre-Primary School 6

## Elective Courses (6 ECTS)

(choose one course from the following)
EDU 412 Organization and Administration of the Educational System

EDU 424 Multimodality and Multiliteracies ..... 6
EDU 481 Christian Ethics and Modern World ..... 6
FOURTH AREA: SCHOOL EXPERIENCE (32 ECTS)
School Experience
EDU 239 School Experience in Pre-Primary School I ..... 6
EDU 339 School Experience in Pre-Primary School II ..... 6
EDU 429 School Experience in Pre-Primary School III ..... 20
FIFTH AREA: ELECTIVE COURSES AND COURSES OF FOREIGN LANGUAGE (25 ECTS)

- Three Elective Courses (from two different faculties)
- Two Courses of Foreign Language

SEMINAR-SENIOR THESIS (12 ECTS)
EDU 490 Seminar-Senior Thesis I
EDU 491 Seminar-Senior Thesis II
Students who choose to compete a Seminar Thesis are exempted from two elective courses.

## TOTAL ECTS FOR THE PROGRAMME OF STUDIES FOR PRE-PRIMARY SCHOOL TEACHERS

| Area of Studies | Compulsory | Department Electives | Free Electives | ECTS |
| :---: | :---: | :---: | :---: | :---: |
| FIRST AREA: PEDAGOGICAL SCIENCES | 29 | 18 | - | 47 |
| SECOND AREA: CONTENT AREA OF STUDIES | 58 | - | - | 58 |
| THIRD AREA:TEACHING METHODOLOGY, EDUCATION AND RESEARCH | 72 | 6 | - | 78 |
| FOURTH AREA: SCHOOL EXPERIENCE | 32 | - | - | 32 |
| FIFTH AREA: <br> FREE ELECTIVE COURSES | - | - | 15 | 15 |
| FOREIGN LANGUAGE COURSES | 10 | - | - | 10 |
| TOTAL | 201 | 24 | 15 | 240 |

## FREE ELECTIVE COURSES FOR STUDENTS OF OTHER DEPARTMENTS

|  | ECTS |
| :--- | ---: |
| EDU 100 Olympic Education | 6 |
| EDU 148 Educational Robotics | 6 |
| EDU 158 Web 2.0 Tools | 6 |
| EDU 178 Science, Technology, Society and Education | 6 |
| EDU 333 Academic Discourse: Critical Analysis and Production | 6 |
| EDU 392 Conducting Critical Synthesis of Critical Studies and Reporting Findings | 6 |
| EDU 394 LGBTQ Issues, Youth and Education | 6 |
| EDU 467 Diversity and Exclusion | 6 |

Note: All elective courses of the programme can be offered as elective courses for students of other departments provided there are seats available.

www.ucy.ac.cy/law/en

## DEPARTMENT OF LAW

The Department of Law was founded in 2006. Its mission is to provide quality legal education to students and the legal community of Cyprus at large as an extension to Greece and the broader region). The Department of Law is pioneer in the study of Cyprus law and its development within the European and international context. The study of law encourages critical legal thinking, through the combination of theory, specialized knowledge and practical activities. The Department also engages in research. Its presence in international, European and domestic research activities is strong and internationally recognized.

## DEGREE IN LAW (LL.B.)

Undergraduate studies in Law must be rigorous: they must meet the important, complex and social role of jurists, as well as the high requirements of those institutional bodies in Cyprus and abroad, entrusted with the conferral of professional qualifications to Law graduates. The University is entrusted with providing students a comprehensive legal education, acquainting them with the practical and ethical considerations they will face, and instilling in them the necessary legal knowledge and methods. The University of Cyprus Law degree programme contains a strong core of 24 compulsory Law courses that cover all basic legal subjects. The students'legal education is completed by the selection of elective courses of specialization (eight or ten, in case students choose to write an LL.B. thesis). Students will develop writing and research skills, through the systematic use of written exercises and semester papers, as this is an important element of both compulsory and elective Law courses. Students who meet certain criteria may opt for preparing an LL.B. thesis. Proficiency in international languages, as well as familiarity with the basic principles of social, economic and political sciences are vital for the contemporary European jurist. In order to complete the LL.B. programme students must take courses in two foreign languages and elective courses from other departments. In this respect, the Department also offers three elective courses in English each semester both for Erasmus students and for Law students.

## Compulsory Courses in Law

The programme contains 24 Compulsory Courses (LAW 1xx, LAW 2xx and LAW 3xx codes), comprising a total of 150 ECTS. The compulsory courses in Law cover the basic legal subjects in each legal branch: Private Law (Civil Law, Business Law), Public Law (Constitutional Law, Administrative Law), Criminal Law, Procedural Law (Civil, Criminal, Administrative procedure), International Law, and European Law. Legal Theory (legal history, jurisprudence, legal method) is also a foundation of the Department's undergraduate studies. In each course, Cyprus positive law is the starting point, placed in a comparative and European context and viewed in the light of policy analysis. Students take the core compulsory courses in Law in the second and third year of studies. The first year covers the introductory and fundamental legal courses. Only the most complex compulsory courses are taught in the fourth year.

## Elective Courses in Law

In the third and fourth year of undergraduate studies, Law students are required to choose eight to ten elective courses (depending on whether they opt for the LL.B. thesis) offered by the Department. Elective courses target specialized subjects of practical and theoretical interest,
and assume adequate command of legal methods and basic legal institutions.

Each year, the Department offers a number of elective courses. Departmental elective courses carry LAW 4xx codes, while other elective courses, open to students from other departments, are coded LAW 0xx. There is no distinction, however, between LAW 4xx and LAW 0xx courses for the purposes of the undergraduate programme in Law.

## Diploma (LL.B.) Thesis

Fourth-year students have the option to undertake a diploma (LL.B.) thesis equal to 12 ECTS, instead of two elective courses of the Department. To be admitted to the LL.B. thesis programme, an average grade of 7.5 is required.

## Elective Courses from other Departments and Faculties

The Law programme allows students to take three elective courses outside the Department from at least two different faculties of the University during the first two years. Each of these courses carry 5 ECTS. Law students are encouraged to take elective courses outside the Department in order to acquire basic skills and knowledge of social sciences and humanities.

## Foreign Language Courses

Law graduates must have adequate command of English and of another foreign language. The programme of studies in Law requires the selection of three courses offered by the Language Centre. During the first semester, students are required to take the course LAN 109 English for Legal Matters. Regarding the second foreign language (e.g. French, German, Italian, Spanish, Turkish, Russian, Chinese), students are required to follow two levels and are encouraged to reach level B1 of the Common European Framework for Foreign Languages.

## COURSE DESCRIPTIONS

## Compulsory Courses

## LAW 101 Law and Legal Method (6 ECTS)

The course aims at: a) presenting the major characteristics and fundamental principles of the legal system and b) acquainting students with the different sources of law and the methods to study them. In this framework, the course explains the important distinction between Public and Private Law and the basic rules of the legal order (hierarchy of sources, legislative and judicial procedures). Furthermore, the structure of the legal rule and legal reasoning is presented in broad terms, followed by an introduction to the methods of interpretation of the law.

The student is introduced to the legal profession and the skills required to study law.

## LAW 105 Constitutional Law I (7 ECTS)

The course examines the current state of the Constitutional Law of Cyprus. Constitutional Law can no longer be seen in isolation from European law and the constitutional arrangements of other jurisdictions (EU, ECHR). In addition, important aspects of the Constitution are analysed (separation of powers), as well as judicial decisions construing the Constitution (doctrine of necessity, protection of human rights).

## LAW 106 Law of Contracts I: General Part (8 ECTS)

Contract Law is at the heart of Private Law - a vital introduction to Law, the foundation of transactions. Topics include the notion of contract and contractual obligation, the requirements for the formation of a valid contract, construction of the contract, contractual terms and matters arising in the course of contract performance.

## LAW 171 European Legal Tradition (6 ECTS)

The course addresses the evolution of law (principally private law) in Europe and the formation of Western legal tradition, from graeco-roman times to present-day European- with emphasis on medieval and early modern law. Western Europe is the course's starting point, with the historical evolution of Greek law and the English Common Law in comparative perspective. The course also presents vignettes from the law of medieval and modern Cyprus.

Basic themes of the course include: unity and diversity in the evolution of European laws; creation and transformation of the learned tradition in law and its central role in the creation of a European legal civilization; the relationship between academic-learned law and legalsocial practice; the role of, and relations between ecclesiastical and secular state institutions; and the debates as to the nature of law (is it a technical system of institutions, a constituent of cultural identity, or an agent of social action?).

## LAW 201 European Union Law I (6 ECTS)

The module introduces the organizational structure of the EU and focuses on its legal system. Specifically, the emphasis is placed on the constitutional principles that the Court of Justice has formulated and on the peripheral and interconnected legal premises that complement the procedural law of the Union. Finally, the approach is one that examines simultaneously the legal response of the national legal orders, on the basis of the analytical hypothesis stating that the evolution of EU law is the product of judicial dialogue.

## LAW 202 European Union Law II (6 ECTS)

The module concentrates on the substantive law of the EU and on the four fundamental freedoms, with the emphasis being placed on the free movement of goods. In addition, the procedural law of the Union is fully explored and explained, as well as the different aspects of the jurisdiction of the Court of Justice.

## LAW 205 Public International Law I (6 ECTS)

The course concentrates on the function, the basic concepts and fundamental principles of the international legal system, the means of international law-making and enforcement. It gives an overview of the traditional and contemporary theoretical approaches to International Law, its sources (treaties, custom, etc.), and focuses on the state (elements of statehood, recognition) as the main subject of International Law. The course also examines the fundamental principles of International Law, particularly the peaceful settlement of disputes as well as the prohibition on the use of force and its exceptions.

## LAW 206 Public International Law II (6 ECTS)

The course focuses on certain areas of international law that are of particular relevance to Cyprus. The course examines the law of the sea, focusing on the maritime zones of the Republic of Cyprus and the dispute in Eastern Mediterranean. Furthermore, the course examines the jurisdictional immunities of states and other actors, as well as the rules of state responsibility. Finally, the course examines the various aspects and phases of the Cyprus problem in the UN Security Council and the main judgments of the European Court of Human Rights on the property rights of the displaced persons.

## LAW 213 Family Law (6 ECTS)

The course examines the legal institutions governing family and interpersonal relations: formation and dissolution of marriage, relations between spouses, marital property, relations between parents and children, paternity, adoption, institutions for the care of disabled persons. The course also considers procedural matters arising with regards to Family Law.

## LAW 216 Law of Property (6 ECTS)

The course examines the meaning and basic forms of rights in rem in the Cypriot legal order, as well as the general principles that govern them. The emphasis of the course is on immovable property: acquisition, content, exercise, transfer and protection of rights in rem, trusts, specific performance, registration of rights in rem, encumbrances and law of the Land Registry. The course also examines the relationship between the property law with the rest of
private law, as well as the constitutional foundations of rights in rem

## LAW 241 Criminal Law I: General Part (6 ECTS)

After examining the concepts of crime and Criminal Law, the course provides a brief introduction to the historical development of Criminal Law in Cyprus and the aims of the criminal sanction. Following that, there is focus on the legal concept of crime and the essentials of criminal responsibility. In particular, the course considers the theories on criminal act, the actus reus (and respectively the kinds of crimes and the omissions), the mens rea (and respectively the kinds of culpability, including recklessness), the problematic of causation and objective imputation, general defences concerning general liability's prerequisites or justification excuse. Finally, the special forms of crime are examined.

## LAW 245 Constitutional Law II: Fundamental Right (6 ECTS)

The purpose of this course is to enrich students' knowledge on the Cypriot constitutional system and to introduce them to the concepts of human rights and fundamental freedoms. The rules that foresee and govern the relations between a state and individuals are known as civil liberties or fundamental rights or human rights. The drafters of the Cyprus Constitution have used, in relation to human rights, the European Convention on Human Rights as a model. Naturally, this is an important factor in the interpretation of the Cyprus law.

This course has been designed to deal with issues related to the protection of fundamental rights and liberties enshrined in Part II of the Cypriot Constitution (which includes Articles 6 to 35) with clear reference to the European Convention on Human Rights (ECHR) and the relevant case law of the European Court of Human Rights (ECtHR) in order to meet the requirements of the legal profession, to encourage independent and critical thinking and analysis and to develop the necessary skills to conduct independent research.

## LAW 311 Company Law I (6 ECTS)

The course examines the regulation of the limited liability company in the Cypriot legal order. The history and objectives of Company Law and its central issues are examined: types of companies, distinction of the company from the partnership, incorporation of the company, principle of separate legal personality, lifting of the corporate veil, transactions of the company and preincorporation contracts, rights and obligations of the members, responsibilities of the general assembly and board of directors, decision-making process, protection of the minority

## LAW 312 Company Law II (6 ECTS)

The course aims at analyzing more specialized concepts and issues of Company Law and, in particular, of the legal framework of private and public companies at Cyprus.

Students will be taught to solve complex company law problems related to the organization and management of the company. Emphasis will be placed on case law of Cypriot and English courts in order to provide a more comprehensive analysis of the relevant issues. Various topics will be discussed, such as: the role and duties of the directors, capital maintenance and alteration, shares, the operation of the general meeting and of the board of directors, the protection of minority shareholders, corporate finance issues, as well as lending and securities (charges), mergers of companies, takeover bids and winding up

## LAW 316 Tort Law I (6 ECTS)

The course introduces students to Tort Law and its particularities in Cyprus. Subsequently, the basic elements of the tort of negligence are analysed, questions of defences and damages, as well as special forms of negligence (medical, employer's, occupier's, manufacturer's). The lectures are concluded with issues of vicarious liability. Throughout the lectures, extensive references are made to methodological issues of the common law in general and Cypriot law in particular. At the same time, comments are made on the history, the evolution and the social function of the torts in question, the relationships among them, as well as on contemporary issues

## LAW 317 Tort Law II (6 ECTS)

The course builds upon Tort Law I. Analysis is made of the torts of strict product liability (Directive 85/374/EEC), breach of statutory duty, private nuisance, trespass to land, assault, defamation and extra-contractual liability of the Republic (especially Art. 172 of the Constitution). At the same time, the relationship among the different torts is examined, not only among the torts analysed under the current course but also under the course of Tort Law $I$. Throughout the lectures, extensive references are made to methodological issues of the common law in general and Cypriot law in particular. Moreover, comments are made on the history, the evolution and the social function of the torts in question, as well as on contemporary issues.

## LAW 318 Law of Succession (6 ECTS)

The course examines the substantive and procedural law of succession, testate or intestate: validity of wills, statutory limitations on testator's freedom, interpretation of wills, intestate succession, protection of heirs and third-party
rights. The procedures for securing succession and clearing the estate are also covered.

## LAW 321 Civil Procedure I (7 ECTS)

The course studies civil litigation as a comprehensive legal phenomenon. General principles of civil litigation, organization and function of civil courts, role of the legal profession. Available remedies. Commencement of civil proceedings. Court hearings. Court judgments and their enforcement. Admissibility and grounds for appeal.

## LAW 325 Administrative Law I (6 ECTS)

The course presents the definition and sources of Administrative Law, which is closer to the continental system rather than the common law system. The analysis of basic articles of the Constitution that constitute a legal foundation for the development of Administrative Law is crucial for the understanding of the general principles of administrative law. The analysis of the administrative organization of the state and the presentation of administrative bodies and organizations in Cyprus, are essential parts of the course. From the matters of the character and categories of administrative acts to the content and application of Article 146 of the Constitution, which provides for the administrative action review, the course will combine theory with an extensive presentation of case law.

## LAW 327 Administrative Law II (6 ECTS)

The course focuses on the forms of remedies provided in Administrative Law, in the course of extrajudicial protection of rights afforded to individuals. Particular emphasis is laid on the development of current review mechanisms of acts of the state, as a result of the operation of independent bodies and state officers, such as the Office of the Commissioner of Administration (Ombudsman) or the Office of the Commissioner for Personal Data Protection. Emphasis is then placed upon the systematic presentation of judicial process, in relation to administrative differences and administrative trial at first instance and during the review process. In this framework, the suspension of administrative acts is also presented

## LAW 342 Criminal Law II: Special Part (6 ECTS)

Focusing on the relevant provisions of the Constitution, the Chapter 154 of the Criminal Code and the case law by the Supreme Court, the course considers serious offences against the constitutional order and the international status of the country, crimes against public order and peace, crimes against the legal exertion of state power, against life, health and sexual self-determination and finally, crimes against property and ownership on the one hand and against currency and documents on the other hand. Special attention is given to perpetrations against
the person and against the property, according to the priority and detailed elaboration reserved to them in the common law tradition.

## LAW 344 Criminal Procedure (7 ECTS)

Drawing on the Criminal Procedure Law and other relevant provisions and case law by the Supreme Court, the course examines the general principles of Criminal Procedural Law, the jurisdiction arrangements, the pre-trial stage, especially the arrest warrant (including the European Arrest Warrant), the search order and the suspects' rights.
Attention then focuses on the intermediary stage (e.g. the detention order, the custody order and the indictment charges). Furthermore, the course considers the trial (summons and subpoenas, procedure in open court, evidence). Special attention is given to evidence, whereby the kinds of proofs and examinations are analysed, as well as their probatory force, the exclusionary rule and the scope of the freedom of the judicial judgment.

## LAW 345 Civil Procedure II (6 ECTS

Evidence Law addresses the process by which a court may take knowledge and form opinion, as to the factual basis of the case at bar. The course presents the basic categories of evidence, questions of admissibility. It scrutinizes the factfinding process and the procedural problems arising in legal practice. The role of appeal in evidence matters is also examined. The course emphasizes the basic principles governing Evidence Law, and insists on the differences between civil, criminal and administrative litigation, as well as on the constitutional dimension of Evidence Law.

## LAW 373 Philosophy of Law (6 ECTS)

The aim of the course is to examine the philosophical approaches concerning the nature of the law and its bonds with power and ethics. The course explores the division between the positivist and the natural law theories. The ideas of the most important philosophers of modernity, like Hobbes, Kant, Rousseau, Hegel, Marx and Nietzsche on law and the state are also taken into consideration, so that the students better understand the work of major legal philosophers of the 20th century, like Hart, Kelsen, Rawls, Dworkin and Habermas, as well as the contribution of the Legal Realists and the Critical Legal Studies movement.

## LAW 418 Financial Law (6 ECTS)

The course examines transactions concerning the financing of economic activity, as well as the institutional framework for their supervision and regulation. Emphasis is placed on bank transactions, insurance contracts and the operation of stock and commodity exchanges. The course also examines prudential institutions and the regulation of banks, financial and insurance institutions and market exchanges.

## Elective Courses

LAW 291, 292, 293, 391 Internship (up to 3 ECTS)
The aim of the course is to give students the opportunity to enrich and implement the knowledge and skills acquired during their studies on real job settings and to gain practical experience in handling legal issues. The exact nature of the activity is determined by the internship organization.

Students have the opportunity to obtain additional knowledge and develop their practical skills, including communication skills, as well as to network with potential employers. 1 ECTS per 4 weeks of internship is granted, up to 3 ECTS in total.

## LAW 400 Diploma Thesis I (6 ECTS)

## Prerequisite: Three years of studies in Law.

LAW 401 Diploma Thesis II (6 ECTS)

## Prerequisite: LAW 400.

Continuation of the course «Diploma Thesis l».

## LAW 405 Criminology (6 ECTS)

The aim of the course is to introduce students to wellknown theories of criminal behaviour and to examine in depth the etiology of serious crimes against persons and against property and, finally, to enable them to be critical in their approach to the phenomenon of crime in society. After an overview of contemporary criminology as a discipline, a number of theories explaining criminal behaviour are discussed: psychological (Freud, Eysenck) and sociological (the Chicago School, differential association, Marxist Theory, labelling, and compound theories). Attention is drawn to offenders and crime victims in general.

## LAW 406 Legal Psychology (6 ECTS)

The course considers the contribution of Psychology (especially experimental and social psychology) to law in a number of areas. After examining how the gap between psychology and law could be bridged, attention is focused on the factors that impact adversely on the accuracy of eyewitness testimony, children as eyewitnesses, the psychology of the jury, sentencing as a human process and persuasion in the courtroom. Finally, lie detection methods on suspect recognition procedures and police psychology are also considered. The aim of the course is to equip students with the specialist knowledge and skills required, in order to answer certain questions in law, utilizing knowledge in empirical psychology from a critical perspective.

## LAW 407 Economic Crimes (6 ECTS)

Addressing economic crime from a criminological perspective and focusing on particular categories of
economic crime, the course first examines the concept of Economic Crime. Attention then focuses on different types of economic crime in Cyprus and overseas. Special attention is paid to offences involving money deception and their investigation by the authorities in Cyprus, as well as how contemporary criminology accounts for them. Money laundering and its relationship with corruption are discussed next. Finally, fraud detection and prevention by auditors are considered, as well as the issue of confidentiality in the lawyer - client and accountant client relationship.

## LAW 408 Organized Crime (6 ECTS)

The course is offered due to the organized crime's legal and legal-political actuality. It considers the notion of organized crime, especially after the UN Palermo Convention, its differences from classical group crimes, as well as from the economic crime, the procedural consequences of the phenomenon (i.e. intrusive investigative techniques, such as surveillances, exceptions from the protection of privacy, cross-checking of data, etc.) and its correlation with similar crimes like drug trafficking, money laundering and terrorism. The course also considers the most important features of organized crime, especially trafficking in human beings. Finally, special attention is given to the analysis and functioning of the European Arrest Warrant.

## LAW 411 Maritime Law (6 ECTS)

Course subjects include: fundamental principles and concepts in Maritime Law, sources and historical development of Cyprus and international maritime law, introduction to common shipping policy. Topics include: ship (identification, ownership, flag, exploitation), admiralty jurisdiction, liability and limitations, ship-building sale and purchase, arrest, security rights (ship mortgage, maritime lien), marine insurance, collisions, towage, salvage, marine pollution.

## LAW 412 Bankruptcy Law (6 ECTS)

The course addresses the principles involved in bankruptcy law and winding up of companies. Various aspects of Bankruptcy Law (Cap.5) are analysed: proceedings from act of bankruptcy to discharge, receiving order, compromise or scheme of arrangement, adjudication of bankruptcy, administration of property, provable debts, appropriation of assets, property available for payment of debts, effect of property on antecedent transactions, realization of property, distribution of property, official receivers, trustees in bankruptcy, jurisdiction, procedure and powers of the Court. Moreover, various aspects of winding up of companies under Companies Law (Cap. 113) are analysed: concept and methods of winding up, winding up by the Court, voluntary winding up, winding up subject to
supervision of Court, schemes of arrangement, reorganization, merger.

## LAW 413 Special Issues in the Law of Obligations (6 ECTS)

This is an advanced course in the Law of Obligations, especially Contract Law. Special types of contracts and complex problems arising in Contract Law, special topics from the law of obligations and the problems of concurring contractual and tort liability are studied. The course also examines in depth the so-called quasi-contracts.

## LAW 414 Law of Trusts (6 ECTS)

Trusts are a valuable tool in economic life. The course evaluates the reasons and main occasions for setting up a trust. It also examines the basic types of trust, the legal relations between involved parties (settlor, trustee, beneficiary), the availability of judicial and administrative control over the trust's administration, and the use of socalled international trusts.

## LAW 415 Copyright Law (6 ECTS)

The course deals with the institutional framework for the protection of copyright and related rights in Cyprus and Europe. The basic systems of copyright are presented and the Cypriot law is analysed in the light of technological legal developments and, above all, European harmonisation. The history and objectives of Copyright Law, its basic principles and the central issues of copyright are examined: the concept of the work, criteria for protection, property and moral rights, co-authorship, transfer and contracts for the exploitation of copyright, licensing of works, collective management and enforcement of copyright.

## LAW 416 Industrial Property (6 ECTS)

The course covers technical creations (patents, industrial designs), and distinctive marks (trademarks, labels of geographic origin). It examines the rationale behind the acquisition of, and choosing between industrial property rights; procedures for acquisition; economic exploitation of industrial property rights, licensing agreements; available remedies (civil, criminal, administrative) and enforcement measures.

## LAW 417 Competition Law (6 ECTS)

The aim of the course is to familiarize students with the structure, function and application of competition law, both at EU and Cyprus level. The students will gain knowledge of the main objectives of competition policy, the legal framework for achieving such objectives and the enforcement of the rules of competition law by national and EU institutions which are responsible for the safeguarding of competition.

## LAW 418 Financial Law (6 ECTS)

The purpose of this course is to examine the legal framework governing the structure and operation of financial markets. More specifically, this course will focus on issues related to banking law, capital market law and financial law.

## LAW 419 Special Issues in Civil Procedure (6 ECTS)

This is an advanced course in Civil Procedure. Emphasis is placed on special procedures, prerogative remedies and the taking of interim measures. The course also considers the operation of tribunals.

## LAW 423 European Business Law (6 ECTS)

This course aims at scrutinizing the foundations of the internal market of the European Union and, more specifically, at analysing the EU fundamental freedoms. The course will analyse free movement of goods, free movement of workers, EU citizenship, freedom of establishment, freedom to provide services and free movement of capital. Emphasis will be given on the relevant case law of the Court of Justice of the EU. Harmonization of the internal market will be scrutinized extensively. Various other specialized topics of EU economic integration will also be analysed. Furthermore, constitutional issues related with the process of economic integration will be discussed.

## LAW 424 Air Law (6 ECTS)

The course regards basic elements of public and private air law, pursuant to international, EU and Cypriot law. Regarding public air law, the course analyses fundamentals of the 1944 Chicago Convention on International Civil Aviation, the international status of airspace, including issues of national sovereignty and air traffic control, as well as issues of aviation criminal law. Private air law deals with the provisions of the 1999 Montreal Convention on passenger and cargo liability of international air carriers, third-party liability of aircraft operators, passenger rights in cases of flight disruptions (delay, cancellation, denied boarding) according to Regulation (EC) 261/2004, as well as rights of passengers with reduced mobility pursuant to Regulation (EC) 1107/2006. Students are asked to interpret and apply relevant legislative provisions and case law through case problems based on actual cases.

## LAW 425 Private Insurance Law (6 ECTS)

The course analyses the basic elements of Private Insurance Law, focusing on insurance contracts. Firstly, fundamental notions and distinctions of private insurance law are presented, alongside the sources of private insurance law. Then, there is a brief presentation of the system of insurance supervision and regulation of insurance companies and insurance intermediaries. The main part of
the course concerns the particularities of insurance contracts, especially their formation, the exclusions of coverage and the description of risk, the notion of utmost good faith, the duty to disclose, the rules governing insurance claims, the rules on subrogation and construction of insurance contracts. Furthermore, the particularities of life insurance, liability insurance and motor vehicle are examined.

## LAW 434 Media Law (6 ECTS)

The course focuses on a comprehensive examination of the legal framework for the media in Cyprus and the EU and the analysis of contemporary legal issues related to the application of communication law on the Internet. In particular, it examines the constitutional, European and international protection of freedom of expression, the legal status of radiotelevision broadcasting (private and public) and the press, the legal framework for advertising, the protection of copyright in radiotelevision broadcasting and the press, the protection of privacy and personal data, responsibility on social media and blogs.

## LAW 438 Energy Law (6 ECTS)

The course constitutes an introduction to Energy Law that allows for a basic understanding of the regulatory and institutional framework at national, European and international level. In this context, basic notions of energy law (sources in the energy mix and characteristics of the energy market) are presented.

Subsequently, a first part of the analysis is dedicated to the sources of energy law (at national, European\&international level) and the relevant institutional framework (specialised national and supranational institutions). The second part of the course focuses on specific themes that are of interest to the Republic of Cyprus: the latter relate to market liberalisation and renewable energy sources.

The concluding lectures are dedicated to current challenges in the field (including digitalization and decarbonization).

## LAW 440 EU Administrative Law (6 ECTS)

The course aims to provide a thorough understanding of the role of administrative law as a means of control and accountability of the EU institutions. The course examines various ways of accountability, including political control through the principle of institutional balance and administrative control through the European Ombudsman. The course then focuses on judicial review by the Court of Justice of the EU (CJEU) which covers both issues of access to the EU courts (standing) and the intensity of judicial review on the basis of the grounds of annulment provided for in the Treaties. In particular, the course examines procedural rights, such as the right to be heard, the
obligation to state reasons and the right of access to documents held by the institutions application of the principle of proportionality combined with the precautionary principle.

## LAW 441 European Public Law (6 ECTS)

The course concentrates on the nature, meaning and different manifestations of European Public Law, as an independent and autonomous field of study. The multidirectional character of exchange of influences is analysed in detail, with specific reference to the protection of human rights, locus standi, the Ombudsman, principle of proportionality, legitimate expectations, access to documents and constitutional law in general. The course examines EPL as a dynamic process of exchange of influences between the EU, national legal systems and the ECHR, and it is from this perspective that a comparative analysis is undertaken.

## LAW 442 Comparative Constitutional Law (6 ECTS)

The module focuses on Comparative Constitutional Law as a special object and as an autonomous field of study. It focuses on the methodology of Comparative Constitutional Law and on the problematic use of it, as well as on the use of the comparative method during the organic evolution of national constitutional law. It is required that the historic and theoretical bases of constitutional law are understood, as well as the evolutionary nature of its progress. The module is founded on the critical approach towards the formation, content and evolution of constitutional orders within a context of pluralism and global constitutionalism. On that basis, the use of the constitutional vocabulary is analysed. More specifically, there will be a macro-analysis of specific constitutional orders (UK, USA, Germany, France, Canada etc.). There will also be a micro-analysis of fields of constitutional law (constitutional formation, amendments, emergencies, separation of powers, proportionality, human rights, Models of Government and State organization).

## LAW 443 Employment Law (6 ECTS)

The course studies issues related to Employment Law in Cyprus and how it is being shaped in light of European harmonization. Beginning with the doctrine of employment at will and its exceptions, the course considers public policy and private rights (as well as constitutional provisions) as limitations on the employer's power to discharge and manage employees. The course also considers the basics of employment discrimination law, some legal issues arising before and after employment (employment references, covenants not to compete), the law governing wages and hours and questions of welfare and social security law.

## LAW 444 Climate Change Law (6 ECTS)

The course covers the evolution of the international framework, from the United Nations Framework Convention on Climate Change to the 2015 Paris Agreement on Climate Change, as well as key aspects of EU climate change regulation, including emissions trading. The course critically assesses the multi-level governance involved in regulating climate change both within and outside the EU's borders, with the division of powers being shared between the EU and the Member States, and EU law coexisting and dynamically interacting with international law. Finally, the course examines how climate change issues find their way in the courtroom by analysing climate change litigation in different parts of the world.

## LAW 445 Ecclesiastical Law (6 ECTS)

The course concentrates on Ecclesiastical Law, the relationship between the Church and the State and on the nature of religious freedom, as well as on procedural matters of the organization of the Church.

## LAW 446 European Energy Law (6 ECTS)

## The course focuses on EU energy law and its

 implementation at national level. Its aim is to introduce students to the evolution of the EU energy policy, examine the relevant provisions of primary and secondary EU law and discuss recent developments (including the Clean Energy Package and the European Green Deal). The course provides an in depth analysis of the regulatory framework related to the main pillars of the EU energy policy, namely the internal energy market, sustainability and security of supply.
## LAW 447 Environmental Law (6 ECTS)

The main purpose of the course is the systematic presentation of the law on the protection of the natural environment, particulalry as it has been shaped by European and international law. The first part of the course introduces the distinct nature of environmental problems and the main challenges of addressing them through legal solutions. The second part of the course deals with aspects of substantive environmental law by examining the use of different types of regulatory approaches, such as the interaction between environmental protection and human rights, and counteracting environmental problems at international, European and national levels.

## NOM 448 Cypriot Public Law (6 ECTS)

The module focuses on the special nature of Cypriot Public Law (CPL) and on the distinct ways of its development within the framework of the idiosyncrasies of the system. The module also focuses on the actual application and on the restrictions relating to the operation of the CPL as a legal phenomenon with international utility due to its
special features. In particular, the teaching method focuses on how to deal with constitutional deadlocks (after 1963) and on the adoption, implementation and definition of the law of necessity. The approach has a strong comparative element and will include the theoretical and conceptual meaning attributed to the law of necessity and to other related legal principles. The emphasis is placed on the judiciary and aims to highlight the degree of proximity to the theoretical and comparative model of the law of necessity. In addition, the degree of systematic application is assessed based on the adherence to the Ibrahim decision. The first part of the course leads to the evaluation of the system and of the case law, from the perspective of being a system open to external influences but also innovatively bold in relation to its mission. The second part of the course is based on the above and examines the consequence of this approach to other areas of public law such as human rights, the relationship with the ECHR, the relationship with the EU law and in particular the principle of the supremacy of EU law, the direct and indirect effect, the preliminary reference procedure etc.

## LAW 449 Tax and Fiscal Law (6 ECTS)

The course studies substantive and procedural tax law, as well as the legal aspects of public finance. The general principles of tax law, its position within the legal system, the concept and types of taxes, the basic concepts in taxation systems and the constitutional and the legal boundaries of the state's power to levy taxes, are examined. The course considers Cyprus taxation law against the international and European background. The administrative and judicial remedies available are also examined.

## LAW 452 International Economic Law (6 ECTS)

The aim of this course is to acquaint the students with the concepts, institutional structure, legal rules and policies of international economic relations. It focuses on the basic principles and legal rules of international trade law, particularly the General Agreement on Tariffs and Trade (GATT) and the institutional role of the World Trade Organization, especially regarding settlement of trade disputes. The course will also give an overview of the substantive rules of international investment law as well as the dispute settlement procedure of the International Center for the Settlement of Investment Disputes (ICSID).

## LAW 453 Law of the United Nations (6 ECTS)

The course aims at familiarizing students with the United Nations' role, function and powers in the contemporary world. It examines the purposes and principles of the UN, the structure of the Organization and concentrates on UN functions and powers in the fields of international peace and security and peaceful settlement of disputes, as well as human rights and development. It also examines the UN
peace operations, including UNFICYP and the legal problems arising from their increasingly expanding activities.

## LAW 455 International Criminal Law (6 ECTS)

The course examines the historical development, the notion and general characteristics of International Criminal Law and the major international crimes (genocide, war crimes, crimes against humanity, etc.). It further examines the basic elements of individual criminal responsibility, criminal prosecution and punishment in the case-law of domestic and international criminal courts. Finally, the course attempts a critical evaluation of the use and effectiveness of the system of international criminal justice.

## LAW 456 Moot Court (6 ECTS)

The course prepares students to argue a hypothetical case on various issues of law, as if before international and/or domestic tribunals, such as the International Court of Justice. Students are guided on drafting written briefs in English and then defending their arguments orally, before panels of judges in the course of various moot court competitions held abroad. The most prestigious such competition is the Philip C. Jessup International Law Moot Court Competition, which takes place in spring in the US capital, Washington D.C.

## LAW 457 International Human Rights Law (6 ECTS)

The course aims at introducing and familiarizing students with the origins, basic concepts and categories of human rights in International Law as well as the sources, principles, mechanisms and critiques of human rights protection in Europe and worldwide. In this respect, it examines civil and political rights as well as economic, social and cultural rights, development and human rights, the principle of equality and non-discrimination, group rights and focuses on the right to life and the prohibition of torture.

## LAW 458 Law of International Organizations (6 ECTS)

The course aims at introducing students to the legal principles governing the functioning of international organizations with a view to understanding their multifarious role in the contemporary world. It examines the concept and consequences of the legal personality of international organizations, their typology, the peculiarities relating to the interpretation of their constituent instruments, their express and implied powers, their responsibility for internationally wrongful acts, and their privileges and immunities. The course examines various universal and regional organizations and focuses on the structure, functions and competences of the United Nations.

## LAW 459 International Development Law (6 ECTS)

The course examines the concepts, policies, rules and institutions of international cooperation for global development and elimination of poverty. It begins by a critical approach to the concept of development and continues to examine the trajectory of international development cooperation, placing emphasis on the role and work of the relevant UN organs and the International Financial Institutions and focusing on the Sustainable Development Goals. It also examines the role of international economic law, the modalities of development cooperation such as official development assistance, trade and development and debt relief. Finally, it focuses on the interrelationship between development and human rights, the rights-based approach to development, economic and social rights and the right to development.

## LAW 461 International Business Law (6 ECTS)

Introduction to the basic types of cross-border business transactions, the international legal framework governing them and the - judicial and alternative - methods of business dispute resolution. Topics include the institutions and sources of International Commercial Law, elements of International Economic Law, international sale of goods, uniform rules and trade usages for the sale and transport of goods, basic types of commercial documents, basic types of transactions for the distribution of goods and services or the financing of international business transactions, legal negotiation and methods for dispute resolution such as international commercial arbitration.

## LAW 462 European Private Law (6 ECTS)

The course examines the interpretation and methodology of EU private law through the study of specific legal instruments, focusing on consumer protection. EU legislation and pertinent CJEU and national case law are analysed concerning the sales of consumer goods, consumer rights in contracts, especially distance and offpremises contracts, unfair commercial practices, misleading and comparative advertising, unfair clauses in consumer contracts, as well as issues of protection of collective consumer interests and alternative dispute resolution. Students are asked to interpret and apply relevant legislative provisions and case law through case problems based on actual cases.

## LAW 463 Comparative Law (6 ECTS)

The course addresses legal diversity and the method for studying foreign legal systems and comparing legal institutions. The course examines the basic characteristics of a legal system (legal sources, administration of justice system, notions of law, legal education and organization of the legal subject matter in fields, outside influences), the
categorization of legal systems in "legal families" and the use of defining notions, such as legal system, legal tradition, legal culture. We also consider the methodology of comparative research (micro- and macro- comparison). The second part of the course presents the basic European legal systems and vignettes from American law and Japanese law.

## Law 464 Alternative Dispute Resolution (6 ECTS)

The course combines the theoretical/interdisciplinary perspective on dispute resolution, with practical/workshop dimension. Theoretical and policy discussion on dispute resolution is followed by negotiation and mediation exercises.

## LAW 466 Law of Contracts II: Commercial Law and Remedies ( 6 ECTS

This is a course in advanced private law, with emphasis on commercial law and remedies in contract. The emphasis of this advanced course on the law of obligations lies in business transactions, as well as commercial papers and the legal treatment of business people. The course also considers the basic principles of commercial law, the relationship and differences between commercial law and civil law. It studies in detail the principal commercial transactions, such as commercial sales, commercial agency, business financing, as well as the basic forms of commercial bills and papers.

## LAW 467 Private International Law (6 ECTS)

Private International Law addresses cross-border relations between individuals: in the courts of which state will the disputes arising from such relations be litigated? Which law should apply? How may a foreign resident be notified of a suit against them? May evidence located abroad be used in court? The course first examines the fundamental concepts and methods for regulating these international private relations (conflict rules, mandatory rules) and the problems in the general theory of Private International Law (legal characterization, fraus legis, renvoi, preliminary questions, application of foreign law, public policy). It then considers the individual areas of Private Law (obligations contractual and in tort, property, family and succession).

## LAW 471 Sociology of Law (6 ECTS)

Sociology of Law is a scientific field of study that draws upon theoretical and empirical studies. The course provides sociological, interdisciplinary and comparative perspectives on the relationship between law and society through a critical analysis of the basic processes of law and legal institutions, and law reform and social change. The course focuses on different theoretical understandings of legal practices and decision-making, the challenges in defining and implementing rights, access to justice and the
"crisis" being experienced by civil courts, and the challenges facing the legal profession and, wherever possible, with reference to Cyprus.

## LAW 472 Gender and the Law (6 ECTS)

The course examines and analyses law through a gender perspective and is divided into three parts. In the first part of the course, feminist and queer theories are presented and the concept of gender is explored. The second part examines issues of equality and prohibition of discrimination in relation to different areas of law such as labour, family and criminal law, and it analyses various issues such as equal pay for women and men, maternity rights in the workplace, sexual harassment, LGBTQI+ rights, domestic violence and violence against women in general, infanticide, rape, abortion and medically assisted reproduction. The third part presents the general legal framework for gender equality in the European Union as well as at the international level, with an emphasis on the United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Council of Europe Convention on preventing and combating violence against women and domestic violence (Istanbul Convention).

## LAW 474 Legal Ethics (6 ECTS)

This course will help students to understand and critically evaluate the role of the legal profession in Cypriot and other European legal systems, and in society as a whole. It addresses ethical concerns within the law, the legal profession, the judiciary, legal education and empirical legal research. The course aims to introduce students to the developing field of ethics, both specific to the legal profession, and as a broader subject of philosophical and academic inquiry. It also provides students with a basic introduction to the professional responsibility of lawyers and judges. Areas covered are: an introduction to philosophical ethical approaches; the legal profession and professional discipline; judicial ethics; ethics in legal education and professional regulation; legal oaths/declarations; research ethics; lawyers' roles in dispute resolution processes including civil litigation and Alternative Dispute Resolution (ADR); ethics and professional responsibility, including duties to the client, the court, the profession and society and access to justice and equality before the law.

## LAW 475 Law and Logic 6 ECTS)

The course examines the use of formal logical methods (propositional and first-order predicate logic) in legal discourse. The course provides students with the necessary background in order to reconstruct legal argumentation in its deductive form and then evaluate it systematically (validity and soundness). The accurate meaning of the
logical connectives of negation, disjunction, conjunction, implication, equivalence which are broadly used in legal texts masked in their natural-language counterparts, such as the terms "not', "or", "and', "if-then', "unless" etc. shall be discussed. Despite the fact that the course mainly focuses on formal aspects, deontic logic, informal logic and fallacies will also be part of the lectures.

## Law 476 Refugee and Migration Law (6 ECTS)

The course examines the legal instruments regulating the situation of refugees and migrants. Part one examines the situation of beneficiaries of international protection and asylum seekers under the 1951 Geneva Convention on the Status of Refugees, the EU legislation and the case law of the Court of Justice of the EU (CJEU) on access to asylum, the case law of the European Court of Human Rights on the principle of non-refoulement, as well as national law with emphasis on the newly established International Protection Administrative Court. Part two examines the legal instruments on migrants from third countries and their families, focusing on relevant international conventions and other law instruments, EU legislation and procedures as well as the CJEU case law on the status of long-term residents and that of undocumented third country nationals.

## LAW 477 Oil and Gas Law (6 ECTS)

The course constitutes an introduction to Oil and Gas Law that allows for a basic understanding of the regulatory and institutional framework at national, European and international level. Basic parameters of oil \& gas law (among others, its historical evolution and the economic, technical and geopolitical dimension of research and exploration of hydrocarbons) are presented in the introduction.

Subsequently, the first part of the analysis is dedicated to the sources of oil and gas law (at national, EU and international level).

The analysis then focuses on hydrocarbons exploration and exploitation in the Eastern Mediterranean (delimitation of maritime zones, production sharing agreements, environmental protection and safety issues, dispute resolution). The concluding lectures are dedicated to current challenges in the field.

## ANALYTICAL PROGRAMME OF STUDIES

|  | ECTS |  | ECTS |
| :---: | :---: | :---: | :---: |
| 1st YEAR |  | 3rd YEAR |  |
| 1st Semester |  | 5th Semester |  |
| LAW 101 Introduction to Law and Legal Method | 6 | LAW 311 Company Law I | 6 |
| LAW 105 Constitutional Law I | 7 | LAW 321 Civil Procedure I | 7 |
| LAW 203 Family Law | 6 | LAW 327 Administrative Law II | 6 |
| LAN 109 English for Legal Matters | 5 | LAW 4aa Departmental Elective Course | 6 |
| LAN aaa Foreign Language I | 5 | LAW 4bb Departmental Elective Course | 6 |
| TOTAL | 29 | TOTAL | 31 |
| 2nd Semester |  | 6th Semester |  |
| LAW 106 Law of Contracts I: General Law of Contracts | 9 | LaW 216 Property (Land) Law | 6 |
| LAW 205 Public International Law I | 6 | LAW 344 Criminal Procedure | 7 |
| LAW 325 Administrative Law I | 6 | LAW 373 Philosophy of Law | 6 |
| LAN bbb Foreign Language II | 5 | LAW 4cc Departmental Elective Course | 6 |
| XXX aaa Free (cross-registering) Elective | 5 | LAW 4dd Departmental Elective Course | 6 |
| TOTAL | 31 | TOTAL | 31 |
| 2nd YEAR |  | 4th YEAR |  |
| 3rd Semester |  | 7th Semester |  |
| LAW 201 European Union Law I | 6 | LAW 245 Constitutional Law II: Fundamental Rights | 6 |
| LAW 206 Public International Law II | 6 | LAW 417 Competition Law | 6 |
| LAW 241 Criminal Law I: General Criminal Law | 6 | LAW 4ee Departmental Elective Course | 6 |
| LAW 316 Tort Law I | 6 | LAW 4ss Departmental Elective Course | 6 |
| XXX bbb Free (cross-registering) Elective | 5 | LAW 4ff Departmental Elective Course | 6 |
| TOTAL | 29 | TOTAL | 30 |
| 4th Semester |  | 8th Semester |  |
|  |  | LAW 312 Company Law II | 6 |
| LAW 202 European Union Law II | 6 | LAW 345 Civil Procedure Law II | 6 |
| LAW 317 Tort Law II | 6 | LAW 4gg Departmental Elective Course | 6 |
| LAW 318 Succession Law | 6 | LAW 4hh Departmental Elective Course | 6 |
| LAW 342 Criminal Law II: Special Criminal Law | 6 | LAW 4ii Departmental Elective Course | 6 |
| XXX ccc Free (cross-registering) Elective | 5 | TOTAL | 30 |
| TOTAL | 29 | GRAND TOTAL | 240 |

## ELECTIVE COURSES

|  | ECTS |  | ECTS |
| :--- | ---: | :--- | ---: |
| LAW 400 Thesis I | 6 | LAW 446 European Energy Law | 6 |
| LAW 401 Thesis II | 6 | LAW 447 Environmental Law* |  |
| LAW 405 Criminology* | 6 | LAW 448 Cyprus Public Law |  |
| LAW 406 Legal Psychology* | 6 | LAW 449 Tax and Fiscal Law | 6 |
| LAW 407 Economic Crimes* | 6 | LAW 452 International Economic Law* | 6 |
| LAW 408 Organized Crime* | 6 | LAW 453 Law of the United Nations* | 6 |
| LAW 411 Maritime Law | 6 | LAW 455 International Criminal Law | 6 |
| LAW 412 Insolvency Law | 6 | LAW 456 Moot Court | 6 |
| LAW 413 Special Issues in the Law of Obligations | 6 | LAW 457 International Human Rights Law* | 6 |
| LAW 414 Law of Trusts | 6 | LAW 458 Law of International Organizations* | 6 |
| LAW 415 Copyright Law | 6 | LAW 459 International Development Law* | 6 |
| LAW 416 Industrial Property | 6 | LAW 461 International Business Law* | 6 |
| LAW 418 Financial Law | 6 | LAW 462 European Private Law | 6 |
| LAW 419 Special Issues in Civil Procedure | 6 | LAW 463 Comparative Law* | 6 |
| LAW 423 European Business Law* | 6 | LAW | 6 |
| LAW 424 Air Law | 6 | LAW 464 Alternative Dispute Resolution | 6 |
| LAW 425 Private Insurance Law | 6 | LAW 466 Law of Contracts II: Commercial Law and Remedies | 6 |
| LAW 434 Media and Computer Law | 6 | LAW 467 Private International Law | 6 |
| LAW 438 Energy Law* | 6 | LAW 471 Sociology of Law * | 6 |
| LAW 441 European Public Law | 6 | LAW 472 Gender and the Law* | 6 |
| LAW 442 Comparative Constitutional Law | 6 | LAW 473 Special Issues of Criminal Procedure Law | 6 |
| LAW 443 Employment Law | 6 | LAW 474 Legal Ethics* | 6 |
| LAW 444 Law of Climate Change* | 6 | LAW 475 Law and Logic | 6 |
| LAW 445 Ecclesiastical Law | 6 | LAW 476 Refugee and Migration Law |  |

* Note: The course may be taught in English.

www.ucy.ac.cy/psy/en


## DEPARTMENT OF PSYCHOLOGY

The Department of Psychology is a vital Department that aims at constantly being at the forefront of teaching and research. It offers a degree in Psychology, which allows its graduates to further specialize in the field of Psychology and practice the profession of Psychology in accordance with the current legislation, or follow an academic or research track. For those graduates who are not interested or are not able to continue their studies on a postgraduate level, there is a variety of professions for which a Psychology degree is useful. The Department focuses on research in many areas of Psychology and especially in Educational, Cognitive, Developmental, Clinical and Social Psychology, areas for which it offers graduate programmes of study.

## CHAIRPERSON

## Charis Psaltis

VICE-CHAIRPERSON
Kostas Fantis

## PROFESSORS

Marios Avraamides
Fofi Constantinidou
Irene-Anna Diakidoy
Georgia Panayiotou
Timothy C. Papadopoulos
Athanasios Raftopoulos
ASSOCIATE PROFESSORS
Kostas Fantis
Irini Kadianaki
Maria Karekla
Charis Psaltis
Georgios Spanoudis
Panayiotis Stavrinidis

## ASSISTANT PROFESSORS

Michalis Michaelides
Panos Zanos
LECTURERS
Alexandros Lordos
Evangelos Paraskevopoulos
Andria Shimi

## PROGRAMME STRUCTURE

The Psychology Degree consists of 240 ECTS distributed to Compulsory and Elective Courses.

Courses with codes starting with 100 are credited with 5 ECTS, because they are open to students from other departments too and can be taken as elective courses. The remaining courses are credited with 6 ECTS, except laboratory courses, which are credited with 7 ECTS. Research Courses (PSY 350, PSY 450) are credited with 3 ECTS. The Undergraduate Thesis (PSY 490, PSY 491) is credited with 12 ECTS.

The programme structure allows students the flexibility of either selecting courses from various areas of psychology or studying one area in depth. The Compulsory Courses ensure that, students cover the basic material necessary to continue to graduate programmes or to seek employment.

## COURSE DESCRIPTIONS

PSY 100 Introduction to Psychology I (5 ECTS)
Psychology is the scientific study that aims at describing and explaining human behaviour. More specifically, the science of psychology investigates the thought processes, feelings and behaviours of human beings, based on the interaction between biology and environment. The goal of this introductory course is to offer certain scientific answers to fundamental questions about the following subjects: development, learning, perception, memory, thought, language, motivation, emotions, personality, psychotherapy, and social interaction. In addition, this course offers review and discussion of theories and methods in different areas of Contemporary Psychology, such as Biological, Developmental, Cognitive, School, Social, and Clinical Psychology.

## PSY 101 Developmental Psychology I (5 ECTS)

The course examines human development from conception to adolescence and the factors that affect it. The basic theories of Development (Biological, Cognitive Development, Psycho-Dynamic, Behaviourism) are presented and discussed. The physical, cognitive and socioemotional characteristics of the individual, during the different stages of development, are also examined. Some of the particular topics, that are included in the course, are the following: research methods, individual differences, and their assessment, genetic and environmental factors that influence Human Development, Cognitive Development, Development of Personality, Moral, Social and Emotional Development.

## PSY 102 Social Psychology I: Introduction to Social Psychology (5 ECTS)

The course aims at introducing students to Social Psychology and exploring the basic fields of Social Psychological Research. It also aims at the familiarization of students with classical studies in Social Psychology, the
history of Social Psychology and selected fields of Social Psychological Research, like Social Behaviour and Intrapersonal Processes, Group Processes, Social Influence, Inter-Group Relations and the reduction of prejudice, and Social Representations. Special emphasis will be placed on the development of gender and national identity, as these are articulated at different levels of analysis.

## PSY 103 Clinical Psychology I:Theories of Personality (5 ECTS)

Basic theories of personality development will be discussed in this course, including Type-and-trait Theories, Factor Theories, Psychodynamic, Behaviouristic and Humanistic Theories. Issues related to personality evaluation and therapy will also be examined.

## PSY 113 Work \& Organizational Psychology (5 ECTS)

The course of Work and Organizational Psychology contributes to our understanding of human behaviour in the workplace and covers both personnel issues, such as selection and training, and organizational issues, such as decision-making and organizational change and development. It explores the changing composition of the workforce, economic conditions and the effects of technology on the nature and content of jobs. Among the topics covered are research methods, principles and practices of work and organizational psychology, employee selection principles and techniques, performance appraisal, training and development at work, leadership and management in organizations, organizational change and organizational culture.

## PSY 118 Fundamentals of Human Sexuality (5 ECTS)

The course aims to provide both theoretical and practical information based on recent research studies related to sexual reproduction, sexual health and illness, familial and erotic factors of sexuality, as well as the effect of religion in the growth of sexuality of the individual. Finally, the most important aim of this course is to guide students to live a healthy sexual life and develop a critical stance towards erroneous, stereotypical and malicious information around issues of sexual health.

## PSY 120 Cognitive Psychology I (5 ECTS)

The course will provide a basic overview of the main areas of research in the field of Cognitive Psychology. The most important theories and findings from the areas of Attention, Perception, Memory, Mental Imagery, Knowledge Representation, Problem Solving, and Decision Making will be discussed. Through optional participation in empirical experiments, students may become acquainted with the methods and procedures of conducting research in the field of Cognitive Psychology.

PSY 123 Psychology of Motivation (5 ECTS)
The main topics concern external and internal motivation; motivation and learning process; motivation and goal achievement, school (academic) performance, attribution
and its relation to school performance, locus of control and self-concept. There are discussions in class on motivating students and as a consequence teachers and parents.

## PSY 131 Psychology of Mourning (5 ECTS)

The course examines the psychological parameters of loss, death, mourning and their history in different cultural groups. Emphasis is placed on mourning stages and their meaning.

## PSY 132 Psychology of Happiness and Adaptive Behaviour (5 ECTS

The aim of this course is to examine the characteristics of happy and well-oriented people and the essential skills needed to confront everyday problems. Techniques of stress confrontation, skills in interpersonal relations, management of negative feelings and health maintenance will be addressed which will be helpful for students' everyday life.

## PSY 170 Educational Psychology I: Child Development and Educational Applications (5 ECTS)

The course examines psychological applications in the educational process. The following specific topics are included in this discussion: Child Development - cognitive, emotional, social, the work of Piaget, Bruner and Vygotsky, as well as neo-piagetians, the context of development, importance of the family and school, motivation, attributions and self-efficacy. Group dynamics and classroom management are also discussed.

## PSY 200 Psychobiology I: Biological Bases of Behaviour (6 ECTS)

The course examines the relation between Biology and Behaviour, the effects of philosophy and biology on psychophysiology. It offers a general view of anatomy, physiology and pharmacology of the Central Nervous System (CNS) and an explanation of how the CNS affects behaviour. The role of the CNS in aggressiveness, sleep, sexuality and reproduction, nutrition, learning and memory is discussed. A general reference is made to the biological role of psychiatric disorders like stress, depression and psychosis.

## PSY 203 Memory (6 ECTS)

This course aims at providing students with an understanding of the main cognitive processes that underlie memory. The course will offer an in-depth examination of how people encode in memory different types of information (e.g. verbal, spatial, visual), and how they recall this information from memory to carry out various everyday tasks. The following topics will be discussed: Iconic and Acoustic Sensory Memory, Shortterm Memory, Working Memory, the various types of long-term memory (e.g. Semantic, Procedural, Explicit and Implicit Memory), forgetting, and retrieval. Recent findings about amnesia and memory loss due to ageing will also be presented.

## PSY 204 Methodology I: Descriptive Research (7 ECTS)

The course provides students with the basic knowledge and skills that are related to descriptive research in general, with particular emphasis on the relevant studies conducted in Psychology. Taking into consideration the philosophical and epistemological foundations of acquiring truth and reality, students are introduced to the various research designs of Psychological Descriptive Research. It is expected that students will acquire the skills to critically evaluate the findings of scientific research. It is also expected that the students will acquire basic skills of designing and conducting psychological descriptive research.

## PSY 208 Health Psychology (6 ECTS)

Health Psychology is the area of research and application that focuses on theories, methods and techniques related to health and illness. This course examines Bio-psychosocial Models, that describe the processes leading to the maintenance of health and the promotion of the psychological well-being of physically ill persons. The course also identifies the psychological and physiological responses of the individual, within the social context in which the relevant health behaviours occur.

## PSY 216 Introduction to Psychoacoustics (6 ECTS)

The course will present the anatomy and physiology of hearing, focusing on auditory processing for language perception. Methods of evaluation of auditory function, and auditory disorders (learning disabilities) will be discussed in detail. Effects of auditory disorders on language and speech development, perception of oral and written language and academic achievement will be presented, in order to justify intervention for improvement of auditory function and optimization of learning ability.

## PSY 217 Family Psychology (6 ECTS)

The aim of this course is to present topics that are included in the four basic dimensions of Family Research: psychological, cultural, educational and clinical. Within the psychological dimension, the following topics are explored: parental role, adoption, family violence, divorce, reconstituted families, effects on children. Within the cultural dimension, the traditional family and its influences on the contemporary family are discussed. The educational dimension explores the relationships between the family and other institutions, such as the school and the community. Finally, within the clinical dimension, various family therapy theories and applications are presented and discussed.

## PSY 220 Clinical Psychology II: Abnormal Psychology (6 ECTS)

This is an introductory course to Psychopathology. It presents the various criteria for the diagnosis of psychological disorders, their characteristics, possible etiology, and approaches to assessment. Systems of
classification are addressed, as well as the criteria that distinguish normal from abnormal behaviour. The course views psychological disorders as the consequences of psychosocial, biological and hereditary factors.
Contemporary and effective treatments are also briefly discussed.

## PSY 223 Psychology of Individual Differences (6 ECTS)

The course will provide a broad overview and general introduction to the field of Individual Differences. Emphasis is placed on the use of genetic designs and research applications, to study differential behaviour within various psychological domains. The course will introduce students to the principles of psychometric testing, and will also present and discuss some of the important psychological constructs on which humans differ, i.e. cognitive abilities, personality, learning disabilities, and psychopathology.

## PSY 301 Experimental Psychology Methods (7 ECTS)

The course will provide students with the knowledge needed to design experiments and to collect, analyse, and interpret experimental data. During this course, students will acquire skills in using the SPSS statistical package to analyse data, and they will gain experience in preparing scientific manuscripts that follow the guidelines of the American Psychological Association (APA). Through in-class analyses and discussions of experiments from various concentrations of research in Psychology, the course aims at developing students' critical thinking.

## PSY 305 Behaviour Analysis and Modification (7 ECTS)

An introduction to the Assessment of and Intervention in Behavioural Problems in the areas of clinical practice, work, and education. Structured observation, recordings and analysis of behaviour will be presented. Learning theories, including Classical and Operant Conditioning, will be discussed, and reinforcement and punishment principles will be studied. Single Case-study Methodology and ABAB experimental design will also be discussed. Throughout this course, students are expected to develop an individualized behaviour modification plan in order to improve an aspect of their personal lives. This course requires participation in laboratories.

## PSY 306 Introduction to Psychology II: Deontology and Ethics in Psychology (6 ECTS)

Psychologists adhere to ethics codes and to the rules and procedures used to implement them. Psychology students must be aware that the ethics codes may be applied to them by state psychology boards, or other public bodies. The Ethics codes apply to psychologists' work-related activities, that is, activities that are part of the psychologists' scientific and professional functions or that are psychological in nature. Thus, in this course, the principles of competence, integrity, professional and scientific responsibility, respect for people's rights and
dignity, concern for others' welfare, and social responsibility are closely examined.

## PSY 307 Counselling Psychology (6 ECTS)

The course examines the basic theories of Counselling that are appropriate for use with non-clinical populations. Interviewing techniques are presented, analysed and practised by the students. Other individual and group counselling methods are also discussed.

## PSY 314 Developmental Psychology II (6 ECTS)

The course examines human development from a life-span perspective. Special emphasis is placed on the basic characteristics of adolescence (biological, cognitive, social and emotional). Adolescent problems, such as the relationship to authority, substance abuse, eating disorders, etc., are also described and discussed. Finally, the course discusses issues related to growing up, maturity and old age.

## PSY 315 Social Psychology II: Intergroup Relations and Social Representations (7 ECTS)

This course will focus on two central fields of Social Psychology: Inter-Group Relations and Social Representations. Regarding intergroup relations, students will be familiarized with the theoretical and practical approaches to intergroup conflict, prejudice and discrimination and improvement of inter-group relations (intergroup contact, categorization, education in mixed contexts). Research findings regarding relations between ethnic groups, immigration and multiculturalism, coming from Cyprus, Europe and Worldwide, will be discussed. Regarding social representations, the course will focus on social representations of national and gender identity. This course requires participation in laboratories.

## PSY 316 Cognitive Psychology II: Attention and Perception (6 ECTS)

The course will present students with an in-depth analysis of the main theories and findings from the fields of Attention and Perception. Among the topics that the course will cover, are the various functions of attention (e.g. divided and selective attention, vigilance, visual search), various topics in perception (e.g. visual and auditory perception, perceptual organization, pattern recognition, depth perception), the applications of attention and perception in daily life (e.g. visual illusions, change blindness), as well as a number of attentional/perceptual disorders (e.g. optic agnosia, Balint's syndrome, hemispatial neglect).

## PSY 319 Interpersonal Processes (6 ECTS)

The course will explore core issues of the social cognition approach in Social Psychology such as Attitude Formation and Change, Social Information Processing, Cognitive Adaptation in a Social Environment, Emotion, Interpersonal Relations, Aggression and Altruism, Attribution Theory, Affiliation Attraction and Close Relationships.

## PSY 320 Learning Disabilities I: Attention Deficits (6 ECTS)

The course outlines the history of attention deficit disorder, describes the core Symptoms of ADHD and discusses the various etiologies contributing to its development. It examines the developmental course of the syndrome and the tested methods which are used to to assess and identify students with ADHD, and various treatment methods that are currently being used to treat the disorder. Theoretical models of ADHD are presented, which describe the many cognitive and social deficits in the disorder. Overall, the course emphasizes that ADHD involves more than just attention deficits - such as deficits with inhibition, self-regulation, working memory, executive functioning, and the organization of social behaviour.

## PSY 321 Cognitive Science (6 ECTS)

Cognitive Science as the science of the human mind aims at introducing students to the basic functions through which the human mind processes information and acquires knowledge. In particular, the course focuses on areas of Cognition, such as attention, perception, memory, thought, learning and language acquisition and language understanding, drawing upon a wide spectrum of resources from psychology, philosophy, linguistics, artificial intelligence and neuroscience.

## PSY 322 Psychology of Reading (6 ECTS)

Reading is a basic skill that is a prerequisite for success in a variety of life and academic domains. It is also a highly complex skill requires the coordination of multiple cognitive processes like perception, encoding, memory, and thinking. This course examines these processes, as they apply to reading tasks that range from word recognition to sentence and text comprehension. However, equal emphasis is placed on the outcomes of reading, in terms of mental representations and knowledge acquisition (learning). Although the course focuses on competent reading, implications concerning reading ability, its measurement and development are also discussed.

## PSY 323 Psychology of Language (6 ECTS)

Language is taught as a linguistic, biological and physical concept. Language comprehension and language production. Language development in children. Theories on the origin of language. Language and thought. Language and education.

## PSY 331 Behavioural Neuroscience (6 ECTS)

The course will present current theories and research studies, pertaining to brain plasticity and brain specialization. The effects of brain damage on neuronal networks, as well as current theories on brain reorganization and repair during childhood and adulthood will be discussed. The effects of genetics, hormones, and metabolism in relationship to normal brain functioning, as well as neuro-pathological, neurological, and behavioural disorders will be addressed.

## PSY 332 Social Psychology of Cognitive Development ( 6 ECTS)

The course aims at familiarizing students with a field of study situated at the interface of Social Psychology and the theories of Cognitive Development. Emphasis will be placed on the educational applications of social developmental theories in peer interaction and cognitive development, as well as co-operative learning. The course will cover core theoretical approaches in the sociogenesis of the mind, including the work of G.H. Mead, Lev Vygotsky, and the sociological studies of Piaget. Finally, more recent research, described as post-Vygostkian and post-Piagetian in relation to cultural psychology, will be discussed

## PSY 341 Social Deviance and Illegal Behaviour (6 ECTS)

The course studies the psychology of individuals, who violate the law or live on the margins of social life. The psychological profiles, cognitive, emotional and behavioural mechanisms that predispose one to develop antisocial behaviours, will be examined. Social phenomena such as family violence, serious criminality, substance abuse and other addictions, as well as membership in cults and other countercultural groups will be addressed from a psychological perspective. The course will also survey methods of assessment and intervention used in these situations.

## PSY 342 Psychology of Substance Dependence (6 ECTS)

The course will address the psychological, social and biological factors that contribute to the development and maintenance of addiction to substances. Addiction to nicotine, alcohol and hard drugs will be addressed. The emphasis will be on the current research in the field, dealing with the etiological mechanisms and predisposing factors in these disorders. Approaches to prevention assessment and intervention will also be discussed.

## PSY 343 Applications of Psychology and Field Experience (7 ECTS)

This course recognizes that vocational readiness is both a developmental and a complicated process for psychology students. The course will offer both knowledge and opportunities aimed at enabling students to gradually and systematically delineate their own vocational path. Professional issues in psychology and vocational development theories will be discussed. Various specialties in psychology will also be presented during the lectures. Students will have an opportunity to explore their professional interests and to further develop their psychological mindedness, vocational skills, self-awareness, and critical thinking, through field experience and various visits to professionals in the community.

## PSY 350 Research Experience I (3 ECTS)

The course Research Experience I is optional. Students who are interested in participating in research projects, should get the relevant permission and ensure the collaboration
with a member of the academic staff who will act as their supervisor. The content of this course is different from the content of the course PSY 490, 491 Dissertation in Psychology.

## PSY 370 Educational Psychology II: Learning and Instruction (6 ECTS)

The course examines learning and the factors that influence it. Course organization is based on three related areas: learning processes, learning outcomes, and contexts of learning. Topics include: theories of learning, learning and memory, strategies, concept acquisition, knowledge acquisition, restructuring and transfer, learning and intelligence, learning in cognitive and knowledge domains, learning and instruction, inductive and deductive approaches, learning tasks, and evaluation.

## PSY 390 Independent Study (6 ECTS)

In this course, the students examine a topic of their interest, which is not included in any specialized course. Students have to get permission for collaborating with a member of the academic staff who will act as their supervisor.

## PSY 401 Diagnostic Methods in Psychology (7 ECTS)

A review of the various Clinical Methods of Assessment used in diagnostic exploration. We will discuss the assessment of personality, intelligence, behaviour, adaptive functioning, cognitive skills, and affective functioning. Psychometric issues, such as reliability, validity, norms, and standardization of tests, will be presented. The dominant diagnostic coding systems will be presented. Ethical and philosophical issues in diagnosis and clinical assessment, such as social stigma, will be explored.

## PSY 402 Theories of Mind and Consciousness (6 ECTS)

The problems of the human mind and its functions are the main topics of this course. Questions like what the mind is, its relation to the body (the body-mind problem), the way it represents the environmental world and its functions, coordination of mental and somatic processes, unconsciousness and consciousness and many other questions occupy people's minds.

## PSY 403 Cognitive Development (6 ECTS)

This is an advanced course and it covers theories of the nature and course of Cognitive Development from infancy to adulthood. The course begins by discussing theoretical issues related to: the structure of the human mind and then proceeds to explore the development of perceptual abilities and attention, examine the development of language and memory, describe several aspects of children's conceptual development, and offers conclusions about the nature of development. This course is designed for students who have already attended courses in child and adolescent development. Most of the readings will be on books and articles, which will be discussed in class.

## PSY 404 Methodology II: Correlational and Experimental Research (7 ECTS)

The course focuses on specialized methodological issues and statistics in psychology. In the area of Correlational Research, students will be introduced to the methodological approaches that lead to Hierarchical regression and Factor Analysis. In the area of Experimental Research, this course covers simple and complex factorial designs with emphasis on both experimental design and statistical analysis. It is expected that, students will acquire substantial skills in both Correlational and Experimental Designs and Statistics. It is also expected that, students will be able to understand complex psychological studies and develop the skills to design and conduct psychological experiments.

## PSY 407 Learning Disabilities II: Reading Difficulties (6 ECTS)

The course covers a wide scope of Reading Difficulties and Dyslexia including the nature, causes, diagnosis, and various forms of treatment, based on different underpinning theories and approaches. The course is divided into six parts: (1) review of the theoretical basis for reading difficulties; (2) identification of principles for diagnosis; (3) review of current reading tests and diagnostic materials; (4) study of the different subtypes of reading difficulties; (5) identification of principles for appropriate remedial programs and (6) writing of case reports. Particular emphasis is placed on the phonological and cognitive correlates of reading difficulties in school-age children.

## PSY 422 Psychobiology II: Neuropsychology (7 ECTS)

Neuropsychology examines the interrelationship between neuronal function and the effects of organic brain damage on brain functions. The course will integrate contemporary clinical and research paradigms on Neuropsychological Theories, assessment of cognitive abilities (e.g. memory, attention, language, visual-spatial abilities, verbal learning, etc.) and psychosocial functions. The effects of specific brain pathologies such as traumatic brain injury, stroke, brain tumors, and neurodegenerative disease (e.g. Parkinson's disease, Alzheimer's disease, and small vessel disease) will be discussed, in the context of the effects of those pathologies on the neurocognitive, behavioural, and psychosocial abilities (e.g. dementia, aphasia, apraxia, agnosia, personality changes, and depression).

## PSY 423 Mental Retardation (6 ECTS)

The course is an introduction to the basic concepts of Mental Retardation, associated with psychological, socia and educational aspects. Special emphasis is placed on similarities and differences between Mental Retardation and normal development advocated by different theories, as well as classification, IQ, chronological and mental age (MA) relationship, motivation, personality, special classes and mainstreaming.

## PSY 424 Knowledge Representation (6 ECTS)

The problem of Knowledge Representation in the human mind is an issue of great importance. Understanding the process of Knowledge Representation also requires knowledge of some basic concepts, such as Propositional and Pictorial Representation, Neural Networks, Neural Distributed Representation, etc., associated with Psychology, Linguistics, Neuroscience and AI. The course aims at acquainting students with various forms of representation and providing a basic understanding of what representation of knowledge is about and how it influences the conception of human behaviour.

PSY 425 Basic Human Pharmacology (6 ECTS)
The course will discuss the relationship between chemical substances and brain function. The course will focus on the interrelationship between the neurochemical properties and events relating to the pharmacological action of prominent drug classes (e.g. stimulants, opiates, hallucinogen, and psychotropic drugs) and their pharmacological action, and effects on behaviour (such as therapeutic, mood altering, dependency and other side effects).

PSY 426 Advanced Topics in Clinical Psychology (6 ECTS)
The course examines the science and practice of Clinical Psychology. It emphasizes topics that are of concern to contemporary clinical psychologists, such as therapy effectiveness and how this is measured, prescription privileges, ethical and cross-cultural issues and other dilemmas. Research methods in clinical psychology are also discussed, with an emphasis on clinical trials, experiments with $\mathrm{N}=1$ and other approaches. Recent research in experimental psychopathology is also covered.

PSY 450 Research Experience II (3 ECTS)
The course Research Experience II is optional. Students who are interested in participating in research projects, should get the Department's permission and ensure the collaboration with a member of the academic staff who will act as their supervisor.The content of this course is different from the content of the course PSY 490, 491 Dissertation in Psychology.

## PSY 490, PSY 491 Dissertation in Psychology (12 ECTS)

The Dissertation is optional. Students, who wish to complete a dissertation project, should get the Department's permission and ensure the collaboration with a member of the academic staff, who will act as their supervisor. Students who choose this course are exempted from two elective Psychology courses.

## STRUCTURE OF THE PROGRAMME



## STRUCTURE OF THE PROGRAMME (continuation)

## Notes:

Students may select from the elective courses of the Department of Psychology. Furthermore, they can select two courses (up to 12 ECTS) from other departments, in addition to the four elective courses dictated by the University rules of attendance, which will be included in the 99 ECTS.
The Elective Courses include the following: PSY 390 Independent Study (6 ECTS), PSY 350 Research Experience I (3 ECTS), PSY 450 Research Experience II (3 ECTS) and PSY 490-491 Undergraduate Thesis (12 ECTS), enrolment in which requires approval of the professor.

- In PSY 390 students study a subject of their choice, not included in a Specialized Course. Students are exempted from an Elective Course from the Department of Psychology.
- Courses PSY 350 and PSY 450 are optional and students are involved in research projects conducted by the faculty of the Department, thus acquiring important research experience.
- The undergraduate thesis PSY 490-491 is also optional.

The students are exempted from TWO Elective Courses from the Department of Psychology.

## TABLE OF GENERAL REQUIREMENTS

ECTS
Compulsory Courses ..... 101
Elective Courses from the Department of PSY ..... 99
Two Compulsory Courses from other Departments ..... 10
Elective Courses from other Departments ..... 20
Foreign Language Courses ..... 10
GRAND TOTAL ..... 240

www.ucy.ac.cy/sap/en

## DEPARTMENT OF SOCIAL AND POLITICAL SCIENCES

The Department of Social and Political Sciences aims at promoting research and knowledge in the fields of Sociology and Political Science. It also aims at raising awareness among the public at large on sociopolitical issues. Emphasis is placed on the creative interaction between theory, research and teaching.

## POLITICAL SCIENCE

The programme of study is structured to offer students a comprehensive education in the key fields of Political Science. The programme aims to provide students with an exceptional education that fosters independent and analytical thought and encourages a reframing of enduring and contemporary political issues while taking into special consideration historical and social context. Students will first become familiar with, and subsequently expand their understanding of the four key subfields of Political Science: Political Theory, International Relations, Comparative Politics and the European Union. The programme also requires students to develop their linguistic, technological and methodological skills. Graduates will develop their skills in theoretical, empirical and critical analysis of complex and multifaceted political phenomena, using contemporary cognitive, conceptual and methodological tools employed by Political Science.

Furthermore, students will (a) enhance their linguistic skills by learning a second language and by developing their composition of complex political essays and assignments, (b) become competent in using a variety of methods of empirical analysis.

## SOCIOLOGY

Sociology is the science that analyses, causally and interpretively, the social aspects of human existence. Social action and, more generally, the social construction of reality are examined in the context of particular social formations, such as class, family, ethnic and religious groups. The sociologist focuses upon the processes of production, reproduction and evolution of society's fundamental structures and institutions. Sociology, more than any other science, studies the behavioural and ideological changes associated with the passing of traditional society. A more perceptive and critical understanding of modernity constitutes the sociologist's basic aim. Students are familiarized with sociological theory, methodology and the main research areas, acquiring skills that will enable them to achieve a systematic understanding of contemporary Cypriot society, as well as to compare it with other societies, modern or historical.

## JOURNALISM

The primary objective of the programme is to educate social scientists and future journalists who will be active in the field of Media. The programme provides a rigorous education to future media professionals while equipping them with the
essential understanding and practical skills, so that they can respond to the needs, challenges and changes that take place in this dynamic field of knowledge. The programme familiarizes students with the structure of media industries and organizations as well as with the key functions of the markets that govern the practice of journalism.

In order to achieve those objectives, the Journalism Programme offers courses that develop students' critical and cognitive skills. The most important goals of the Programme are the following:
(a) Familiarizing students with media organizations and industries as well as with the most important technologies that have been recognized as milestones in the development of communication.
(b) Providing research training to social scientists.
(c) Encouraging rigorous research in the field of Journalism.
(d) Cultivating basic skills, such as writing and reporting.
(e) Referring to the interdisciplinary aspect of journalism and its relationship with other social sciences and humanities History, Language, Economics, Sociology, Political Science.
(f) Providing basic technical skills for collecting and analysing information, producing audiovisual content and honing the art of telling stories.

The disciplines of Communication Studies and Journalism are becoming increasingly important, as, today, the acquisition, dissemination, exchange and management of information are a primary focus of a state's economic, political and cultural activities. This explains the recent development of the discipline, as well as the delineation of specific fields and the establishment of curricula for Communication Studies, Multimedia Studies, and Journalism. Therefore, most universities today offer programmes in the above-mentioned disciplines, often incorporating courses from the Humanities and Social Sciences, which will ensure a multifaceted and pluralistic education for future journalists, while at the same time underlining the importance of technical/vocational training. The University's new programme of study has been designed in such a way as to combine academic training with practical applications and encompasses the wider issues of communication, media, technology and the study of social phenomena. The main objective of this programme is to teach students how to understand, study and manage the communication revolution. Therefore, instruction will include, apart from the main courses of Journalism, courses in Political Science, Sociology, History, Literature and Foreign Languages.

## COURSE DESCRIPTIONS <br> Sociology

## SPS 101 Introduction to Sociology (6 ECTS)

The course is an introductory overview of sociological theory, methodology and research. Its aim is to familiarize students with sociological thinking and argumentation. Special emphasis is placed on the character of Sociology as a science, and the historical evolution of the discipline, both in Europe and the USA.

## SPS 102 Classical Sociological Theories (6 ECTS)

The course is a systematic introduction to the work of the classic thinkers of the discipline. It aims to familiarize students with the main issues and problems of sociological theory up to WWII. Special emphasis is placed on the methodology of sociology, modernity and the key characteristics of capitalist society. The course emphasizes the importance of classical texts and examines the role they continue to play in sociological thinking.

## SPS 105 Introduction to Social Anthropology (6 ECTS)

Social Anthropology focuses on the comparative study of society and culture. It aims at reaching a better understanding of other peoples and societies, as well as furthering the understanding of one's own society by reflective mirror. It poses a strong challenge to ethnocentrism and attempts to promote understanding and tolerance among different peoples.

## SPS 146 Introduction to Qualitative Social Science Methodology (7 ECTS)

The main aim of this course is to provide students with a basic introductory knowledge of qualitative research, qualitative methodology and qualitative research methods in sociology and the social sciences, and to help them understand how these methods can be used to connect the details of everyday life with broader social processes and structures. Students will acquire knowledge and skills that they will be able to apply in the future, to conduct qualitative research on social phenomena and issues that interest them.

## SPS 147 Introduction to Quantitative Social Science Methodology (7 ECTS)

The course covers the foundations of the field, including the relationship between theory and research, the logic of causation, research design, ethics of research, issues of reliability and validity, etc. It provides students with an overview of the entire research process, including operationalization, techniques for construction of questionnaires, indexes, scales and typologies, sampling, data analysis and different types of social statistics. In addition to familiarizing themselves with examples in each of the above, students are evaluated on the basis of practical short assignments that must cover all the major sub-divisions of quantitative research.

SPS 211 Contemporary Sociological Theory (6 ECTS)
Beginning with Parson's emphasis on macro-sociology and functionalism, this course then examines various microsociological approaches, as well as attempts towards the integration of sociological theory between these two poles. Each sociological model is examined by placing it within the socio-historical conditions of its creation. The central issue pursued involves the dualism of structure and action, along with the efforts to transcend it.

## SPS 212 History of Sociology (6 ECTS)

The course offers a brief historical overview of the evolution of sociological thinking from Comte to Parsons. The emphasis is on the breadth, and not the depth of sociological thought. The course examines the key elements of the work of a wide range of sociologists in Europe as well as in the USA.

## SPS 213 Youth and Society (6 ECTS)

The course focuses on the processes of the socialization of young people in modern society and the various related issues. Specific topics include the development of personal identity among adolescents; the role of peer groups; the development of various subcultures; the role of the media; the role of sexuality; the relationship between family and teenagers and the impact of this relationship on the youth.

## SPS 215 Volunteerism: Theory and Practice (5 ECTS)

The aim of the course is to critically examine and analyse the phenomenon of volunteering from a sociological perspective vis-à-vis contemporary topics of concern, investigate the transitions effectuated in recent years and draw a picture of the trends already in the pipeline in the wider field of volunteering and in civil society in general. The course offers a basic introduction to the main reflection of our time on volunteering and the volunteer movement; stances, values and perceptions with an emphasis on young people vis-à-vis the contemporary social and political reality, providing an extensive basis in the cognitive object in question. Covering a plethora of topics, it draws from a wide field of analytic theoretical approaches and corresponding thinkers, in the midst of emerging challenges of concern to the global society. An important aim of the course is to give students an opportunity to work as volunteers, reflect on possibilities for social change through volunteerism and encourage further participation.

## SPS 221 Sociology of Deviance (6 ECTS)

The course is a systematic introduction to the conceptual and empirical bases of the sociological analysis of deviance and social control. Special emphasis is placed on the social construction of deviance and the role played by sociological categories, such as social class and gender.

## SPS 231 Social Stratification (6 ECTS)

The course is a systematic introduction to theories of class analysis and other approaches to social stratification. It begins by examining the theories of Marx and Weber and moves to more contemporary thinkers. While the emphasis is
placed on social stratification in modern societies, a comparative-historical perspective is also provided.

## SPS 241 Cyprus Society (6 ECTS)

The course analyses Cyprus as a whole, as a currently divided country that is inhabited by various social and ethnic groups. The course begins with the most contested issue: History. Following this, it examines a range of topics, including language and dialect, poetry and literature, political parties, church and religion, gender and migrants.

## SPS 243 Contemporary Issues in Social Policy (6 ECTS)

Social Policy is preoccupied with the administrative practice of welfare provision in the domains of Health Care, Education, Employment, Community Care, Criminality, Unemployment, Mental Health, Gender, Poverty and Ageing Populations, etc. In a more general sense, this course addresses the issue of welfare action beyond governmental jurisdictions.

## SPS 244 Social Theory and Citizenship (6 ECTS)

The aim of the course is to study the concept of "citizenship " highlighting stories, ideologies, practices, and rules that are inextricably linked to the power relations that prevail in every political community. In other words, citizenship emerges as a mechanism of social inclusion and political exclusion, as it is a differentiating construct: it separates those who have it from the rest. What is constantly shifting are the limits and the ways of integration and exclusion. This is the historicity of the concept of citizenship in its relations with the state, democracy, immigration, gender, ethnicity, globalization and more. The aim of the course is to highlight this problematic issue through an interdisciplinary comparative approach, based mainly on social and political theory.

## SPS 245 Sociology of Gender (6 ECTS)

Gender, race and class are conceptualized as constituted and constituting forces, which drive the propensity of modernity toward social mobilization reform and/or revolutionary breakthroughs. These concepts will be studied as a cluster of causal reasons, that reinforce stratification and concealed violence thereby enhancing a hierarchical model of integrating modernity. At the same time, we shall foreground counter-possibilities, as these emerge from the crossbreeding of such experiences of oppression, through the anti-hierarchical organization of self-ruling communities, able to convert necessity into freedom and identity into difference.

## SPS 246 Critical Theory (6 ECTS)

The course explores the evolution of Critical Theory, as an uncompromising critique of modern bourgeois civilization. It elucidates the various ways, in which contemporary critical theory inseminates creative research. The course explores the evolution of Critical Theory as an uncompromising critique of modern bourgeois civilization. It elucidates the various ways, in which contemporary critical theory inseminates creative research (in relatively unsuspected and uncharted areas), by critical discourse such as the health industry, criminality,
education, city planning, architecture of urban space, etc. The main objective of the course is to enable the participants to nurture critical research orientations, as specialized forms of social intervention in the modern world.

## SPS 247 Quantitative Analysis in Sociological Research (6 ECTS)

This class builds on the skills and knowledge acquired by students in previous modules (e.g. SPS 147 Introduction to Quantitative Social Science Methodology). The aim of the course is to introduce students to specific methods of quantitative analysis of empirical data in Social Sciences and, especially, in Sociology. The curriculum also covers graphical methods, as well as non-parametric methods of analysis.

## SPS 269 Basic Principles of Political Economy (8 ECTS)

The aim of the course is to familiarize students with the basic concepts and methods of political economy. Particular emphasis is placed on the theories of value, the repartition of incomes, the theories of crises, as well as the evolution tendencies of the free market economy. The state and central bank policies, within contemporary economies (fiscal policy, monetary policy, foreign exchange policy), are also examined.

## SPS 300 Higher Education, Policy and Society (6 ECTS)

Higher education policy has become a major issue within the scope of the knowledge society and lifelong learning. The course aims at exploring this topic at the intersection of policy and society. It analyses the objectives and the historical development of higher education policies at the supranational and national levels, in a comparative perspective. There is a particular focus on the Europeanization and internationalization of higher education, and the restructuring of the relationship between the public and the private sectors. The connection between higher education and other critical issues including social inclusion, social mobility, employability and economic development, are also studied.

## SPS 301 Cultural Sociology (6 ECTS)

The course entails the analysis of the relationship between culture and society and focuses on the effect of cultural factors on social behaviour. The historical evolution and the different meanings of the terms "culture" and "civilization" are examined, as well as different approaches to the study of the field. Specific areas of interest include the study of cultural sub-cultures, the relationship between culture and commercialization, and the role of mass media in modern culture, the relationship between society and music, cinema, and other art forms, etc.

## SPS 302 Sociology of Economy (6 ECTS)

The course is a systematic introduction to industrial sociology, offering a comparative-historical perspective on industrialization. It examines theories of the industrial revolution and models of scientific management (F. Taylor), the phenomenon of automation, the microelectronic revolution and various phenomena related to post-industrial and information societies.

## SPS 303 Modernity and Postmodernity (6 ECTS)

The course focuses on the conflict between different logics of modernity, with the major issue being whether modernity's project remains incomplete, or whether it has consequently been replaced by a post-modern condition. The debate focuses on the affinities between modernity and Enlightenment, post-modernity and globalization and how these relationships reflect on the epistemological controversy over relativism, the crisis of rationality and method in the social sciences.

## SPS 304 Sociology of Mass Media (6 ECTS)

The course is a systematic introduction to the Sociology of Mass Media and Communication. It examines the wide spectrum of human communication, with an emphasis on the role of the mass media in modern societies. The course places special emphasis on sociological and communication theories and on the methods of measurement and communication models.

## SPS 305 Sociology of Tourism (6 ECTS)

Sociology of Tourism examines economic and the social aspects of this new industry. Special topics include the development of tourist cities, the cultural, social and economic impact of tourism on the host society; the cultural imperialism thesis, the development of specialty tourism, such as Ecotourism, and so on.

## SPS 306 Social Movements (6 ECTS)

The course is a systematic introduction to the sociology of social movements. It offers a comparative-historical perspective on the social preconditions of a wide spectrum of social movements, be it of a reformist or a revolutionary character. Theoretical issues are examined, always in reference to the analysis of empirical data, both from Cyprus and from other societies.

## SPS 307 Sociology of the Family (6 ECTS)

The course is a systematic introduction to the basic concepts, methodology and empirical research related to the sociology of family. The social structure of family life is examined comparatively in both traditional and modern societies. Emphasis is placed on the effects of processes of social change, and especially modernization, on the character and the structures of family life.

## SPS 311 Sociology of Minority Groups (6 ECTS)

The issue of minority groups is currently one of the major issues for the New Europe of the 21st century. Different dimensions include the definition, criteria, and rights of minority groups, the relationship between immigration and minority group formation, etc. The course inquires into different aspects of these issues, with special attention to particular minority groups inhabiting the Eastern Mediterranean and the Balkans.

## SPS 314 Political Sociology (6 ECTS)

The course is a systematic introduction to the basic concepts, methodology and empirical research of political sociology. The social basis of politics is examined, through the analysis of different systems of political organization, different forms of political action, the role of ideology and the processes of political conflict and change. Special emphasis is placed on theoretical issues, always in relation to the analysis of empirical data from Cypriot and other societies.

## SPS 315 Ethnography and Anthropological theory (6 ECTS)

The course examines classic pieces of ethnographic writing, as well as recent attempts at experimental ethnography. These ethnographies are discussed in light of the theoretical trends that influenced them (or that they initiated), as well as the sociohistorical conditions of their creation. Emphasis is placed on the "literary turn" in anthropology, which analyses ethnographic texts using techniques from literary criticism.

## SPS 317 Identity and Difference (6 ECTS)

Approaching identity and difference as inextricably linked to power relations, the course highlights: a) that the personal is socio-political; b) the ways in which we participate individually and collectively in the production, reproduction and legitimization of power relations, social stigma, social hierarchies and social divisions; c) the links between the construction, legitimization and delegitimization of subjectivities and identities, and socio-political hierarchies (race, gender, class, ethnicity, religion, sexual choice/sexual orientation, gender identity etc.); d) the importance of critical analysis in achieving anti-hierarchical socio-political relations; and e) the factors that contribute to achieving, promoting or hindering socio-political change. The aim of the course is to raise students' awareness towards the social constructions of identity and difference and to their social and political implications. The course promotes the redefinition of what we perceive as "identity" and "difference" and helps to broaden the meaning of "privilege", "exclusion" and "power relations" once we take seriously the ways in which identity and difference shape who we are, how we think and act, and what "realities" we construct.

## SPS 319 Anthropology of Religion (6 ECTS)

The course begins with an overview of classic sociological and anthropological approaches to religion. A significant question raised is whether anthropology explains religion or rejects it. Can religious phenomena be approached through an anthropological viewpoint, or are they primarily issues related to esoteric, mystical experiences? Other questions raised are: What exactly is magic? Does the world inevitably move towards secularism? Is religion an illusion? If so, why does it exist? Is religion a means of oppression, or resistance? What is the role of ritual? How can contemporary sects and New Age Movements be explained?

## SPS 320 Ethnicity and Nationalism (6 ECTS)

The course examines the social dimension of ethnicity and the construction of national identities. The focus is on the
development of nationalism, ethnic relations, the formation of the nation state, and the production, as well as the consumption, of nationalist ideology. The emphasis is on the global scene, but systematic references are also made to Cypriot society.

## SPS 322 Political Anthropology (6 ECTS)

Political Anthropology is the cross-cultural comparative examination of politics. It focuses on the following issues: power and authority, stratification and inequality, ideology, violence, the political role of ritual and religion, resistance, political identity and nationalism.

## SPS 324 Transnationalism and International Migration (6 ECTS)

The new immigrants or "transmigrants" maintain ties with their homelands and acquire multiple identities. The constant weaving of these transnational relationships provides the most prominent example of the transnational experience worldwide. New transnational communities are being formed which connect villages, individuals, states, regions, and movements across borders, and which create new dynamics in a host of domains, including religion, family, economic development, and so on.

## SPS 325 Sociology of Law (6 ECTS)

The course evaluates the ongoing symbolic interaction between social and legal theory, with reference to phenomena of legal overregulation, juridification of socia relations and conflicts, overload of the legal system by socia claims, etc. The way in which social theory becomes part of legal theory's self-reflexivity is also examined, in light of the latter's attempt to reform the legal system.

## SPS 326 Sociology of Health (6 ECTS)

The course is a systematic introduction to the basic concepts, the methodology and the empirical research of the sociology of health. Special emphasis is focused on the social relativity of disease (physical as well as mental) and the ways in which organized society and especially the state provide for people's health.

## SPS 327 Contemporary Trends in Social Theory (6 ECTS)

The course aims at the understanding and critique of newly emerging theoretical models in the social sciences, currently in the process of becoming influential. Particular emphasis is placed on theories of postmodernism, deconstruction and post-colonial criticism

## SPS 328 Sociology of Urbanization (6 ECTS)

The course is a systematic introduction to the sociology of urban life and urbanization. The development of cities is examined in a comparative-historical perspective, and the focus is on those processes of urbanization, which are connected with the wider phenomenon of modernization The emphasis is on the effects of urbanization on a wide range of other social processes - economic, political and cultural.

## SPS 329 Sociology of Technology (6 ECTS)

The course is a systematic introduction to the sociology of technology, analysing the effects of technological development on social life. Various theoretical approaches are examined, from both classical and contemporary sociology, always in reference to the analysis of empirical data, from Cypriot and other societies.

## SPS 330 Sociology of Knowledge (6 ECTS)

The course is a systematic introduction to the concepts, methodology and empirical research of the sociology of knowledge. The relation between knowledge and society is examined in classical sociology (especially the work of Marx and Durkheim), as is the more recent and more systematic sociology of knowledge that has developed from the work of Scheller, Manheim, Schutz, Berger and Luckmann. Special emphasis is placed on the relation between consciousness and modernity, ideological thinking and the consciousness of everyday life. An extensive introduction to social phenomenology is also provided.

## SPS 331 Sociology of Work (6 ECTS)

The course is a systematic introduction to the sociology of work, analysing the historical evolution of the concept of work and trade unionism. Various theoretical approaches, both from classical and contemporary sociology, are examined and students are familiarized with empirical research in the sociology of work.

## SPS 332 Social Problems (6 ECTS)

The main aim of the course is to help students understand the concept of social problems and different approaches in their analysis. It also aims to raise students' awareness towards the role of broader social processes and existing socio-political structures in the construction of various social problems and in the reproduction of wider power relations, as well as to the phenomena of social exclusion and inequality. The course promotes a redefinition of how we perceive and approach "social problems" and helps to broaden the meaning of "privilege", "exclusion" and "power relations", once we seriously consider the ways in which approaching social problems is related to, and influences, how we think and act - both individually and collectively as well as what "realities" we construct and reproduce.

## SPS 333 Sociology of Religion (6 ECTS)

The course is a general introduction to the sociology of religion. Primary goals are: (a) understanding the role of religion in society and (b) understanding the institutional features of religiosity (ceremonies, sects, movements, etc.). The course includes both classical and contemporary sociological perspectives. The basic issues in the field include the universal spread of secularization and the relationship between globalization and religion. Special reference is made on the relations among religions, society and the state in the Greek-speaking world, as well as the connections between Greek identity and Eastern Orthodoxy.

SPS 336 European Economic Integration (6 ECTS)
Introduction to the economic development and social expansion of the European Union. Perception of the EU as a social and economic system. Students will develop an understanding of the different ways in which European integration has been understood, and what this implies for the trajectory that the EU is likely to take in the future. To complement this analysis, a number of crucial issues pertaining to the role of technology will be discussed, including an overview of important policy areas, institutional design, relations between Member States and the EU, Economy, Society and Technology and Technological Change, Social Europe and Social Policy.

## SPS 337 Social Ecology (6 ECTS)

Under the post-materialist constellation of values that increasingly characterize contemporary society, social theory is called on to inquire into the crisis of the urban and natural environment, in terms of a crisis of anthropocentric morality. The critical issue to be addressed, therefore, is whether modern trends in social theory may inspire a shift away from anthropocentrism to biocentric sociological agenda, that will reformulate the social contract in the context of the urban and natural environment.

## SPS 340 Social Theory and Cinema (6 ECTS)

The course approaches cinema as a textual system by rereading concepts of psychoanalytic, Marxist and poststructuralism social theory in the context of cinema. The course examines cinema as industry, institution and as a system of representation that rewrites the subjects in their social positions.

## SPS 347 Myths, Misconceptions, and the Misuse of

 Empirical Research in the Social Sciences (6 ECTS)Although the course curriculum refers to the Social Sciences in general, most of the sessions will focus on practical examples taken from the disciplines of Sociology, Political Science and Journalism. During the class sessions (which will take place in a computer lab), students will study published papers and reports that have methodological problems and weaknesses. Students will study articles from the daily or weekly press (e.g. the Economist), in order to practise the task of summarizing the main findings of empirical research. Students will discuss how the findings of empirical research are often distorted in the popular press.

## SPS 348 Qualitative Research in Social Science (6 ECTS)

The course aims at enhancing students' knowledge on qualitative techniques related to research. Students gain an in-depth knowledge of participant and non-participant observation, focus groups, semiotics, content analysis, indepth interview and ethnography, through the application of these techniques in practice. Using one or more continuous projects, students are expected to perform all the major steps of qualitative research, culminating in one or more research reports.

SPS 349 Applied Research in Social Science (6 ECTS)
The course enhances students'knowledge on quantitative techniques and applies it to the analysis of data sets. Students familiarize themselves with relevant statistical packages suitable for the social sciences (SPSS, SAS or another major statistical package), as well as with the relevant sources of data at the national, EU, and international level. Emphasis is placed on the use of this knowledge in practice. Using relevant statistical packages, students conduct (and are evaluated on) specific exercises, designed to help them understand how to use quantitative methods in applied social research.

## SPS 401 Global Society (6 ECTS)

The purpose of the course is to examine the repercussions of globalization from the perspective of post-modernism and cultural theory, and more specifically, the social and cultural consequences of the Information Age (or Global Age). These consequences include the impact of information technology on family life, community, religion, and other sociological areas of concern; the emergence of risk societies; the emergence of new, gendered, racialized or other ethnic or "hybrid" identities; the rise of cosmopolitanism and localism, etc.

## SPS 402 Truth, Memory and Reconciliation: Comparative Sociological Perspectives (6 ECTS)

From the discussion regarding the Holocaust and the Nuremberg Trials, to the current debates regarding "Truth, Justice and Reconciliation" like the South African "Truth and Reconciliation Committee" this class compares the key efforts that took place in various societies. The major axes of debate revolve around four issues: justice, reconciliation, memory and historical truth. These topics are examined with a sociological emphasis on the relationship of such efforts with the public at large, regarding the planning, participation and results.

## SPS 403 Historical Sociology (6 ECTS)

Historical Sociology uses the historical record as a means for developing specific generalizations about human societies. The field covers the entire human record, but focuses on the factors and processes involved in the process of societal modernization. Specific sub-fields covered include: comparative-historical sociology, worldsystem analysis, social history, world history (a sub-field shared with historians), the figurational sociology (of the late Norbert Elias), etc.

## SPS 405 Contemporary Issues in Sociology and Social Theory I (6 ECTS)

In this class, students will analyse contemporary social issues, trends and movements under conditions of rapid change, often on a global level. Students will focus on specific topics to gain an in-depth understanding of the material, and will be taught through lectures, presentations and discussions of sources drawn from a variety of media. The class strives to create possibilities for reflexivity and critical defamiliarization

## SPS 406 Contemporary Issues in Sociology and Social Theory II (6 ECTS

In this class, students will analyse contemporary social issues, trends and movements under conditions of rapid change, often on a global level. Students will focus on specific topics in order to gain an in-depth understanding of the material, and will be taught through lectures, presentations and discussions of sources drawn from a variety of media.

## SPS 419 Image of Contemporary Society (6 ECTS)

This class focuses on the theoretical debates surrounding the politics and sociology of representation. From the period of colonialism and anti-colonial struggles, to the creation of modern states and the subsequent rise of postmodernism, the image has been a means, as well as a site of struggles and contestations. The rise of the image, as the primary means of public communication, makes its analysis necessary. Drawing on specific examples from Cyprus and other countries, this class aims at giving students the skills necessary for the theoretical, critical and analytical negotiation of images.

## SPS 422 Social Intervention and Change (6 ECTS)

"Class" is discussed in all its meanings: economic, pedagogical (classroom) and classificatory. The course aims at students' active participation, where the process is part of the learning. It is based on important critiques of modernity: the individual as a passive receptor (Debord); the imposition of "lessons" through education (Freire); and disciplinary institutions (Foucault). Sociopolitical topics are also studied in the wider sense of the term that emerge from these discussions.

## SPS 450 Placements in Organizations (12 ECTS)

This is an elective course carried out during the Summer Semester of the 3rd year of studies. In order to enroll to the course, a minimum grade point average 7.5 and written consent from the academic coordinator of "Placements in Organizations" are required. In case students do not enroll to the course, they must choose two other courses from the Specialization Courses list or Dissertation.

## Political Science

## SPS 151 Introduction to Political Science (6 ECTS)

The purpose of this introductory course is to familiarize students with the basic issues, concepts, research methods and theoretical approaches of Political Science. It includes a historical overview of the development of this discipline, but it focuses primarily on contemporary thematic orientations, approaches and research methods used for the study of political phenomena.

## SPS 152 Comparative Politics (6 ECTS)

The course introduces students to Comparative Politics, as one of the major areas of Political Science. It discusses and
trains students in the comparative method of analysis and addresses basic concepts, such as state, nation-state, political systems, political culture, political socialization, social critique, political parties, interest groups and political development in a comparative setting. It examines case studies of European and other countries.

## SPS 153 International Relations (6 ECTS)

Introductory course on the contemporary international political system with emphasis on the structures, factors and processes, which form the world political scene and affect relations among states. Emphasis is placed on the role played by states, international organizations and other entities and factors in shaping the dynamics, issues and outcomes of international politics. Some of the basic concepts and issues examined include the state, international organizations, power, balance of power, national interest, diplomacy, international law, foreign policy, war and regional integration.

## SPS 154 Political Theory (6 ECTS)

The purpose of this course is to familiarize students with classic texts. Furthermore, basic concepts and ideas that shaped European political structures are explored.

## SPS 155 Foreign Policy (6 ECTS)

The course offers an introduction to the fundamenta concepts and major theories of foreign policy analysis, as well as a sketch of important decisions and actions in the foreign policy of a superpower (USA) and a middle power (Greece).

## SPS 156 European Integration (6 ECTS)

An introductory course on European integration, which looks at the basic concepts, trends and processes of political and economic integration. Issues of integration are examined from a historical and theoretical perspective, focusing on the foundation and evolution of the European Communities. It also examines the potential, prospects and problems of the process of deepening and widening the EU.

## SPS 157 Political Analysis and Methodology (6 ECTS)

This course introduces students to quantitative and qualitative methods of empirical research, in the context of political sciences. The curriculum covers the use of existing data, as well as the generation of new data. Students learn ways to use data from international studies, such as the European Social Survey, and to apply simple statistical methods using the R statistical package. In addition to quantitative methods, students become familiarized with qualitative methods, such as interviews, focus groups and observations

## SPS 232 Gender, Power and Politics (6 ECTS)

The main aim of the course is to raise students' awareness of the social constructions of gender and their political
implications. The course promotes the redefinition of what we perceive as "politics", "political activity" and "political agency". In other words, the course helps to broaden the meaning of "politics" and "power relations" once we take seriously the ways in which "gender" shapes who we are, how we think and act, as well as what "realities" we construct.

## SPS 251 The Political System of Cyprus (6 ECTS)

The course offers a historical, social, and political analysis of the pre- and post-establishment of the Republic of Cyprus. Basic concepts such as Constitution, political system citizens' rights and institutions are discussed, with detailed reference to Cyprus. A critical view of the Cyprus constitutions and detailed analysis of articles and treaties are also presented.

## SPS 256 Law and Politics (6 ECTS)

This course examines the conceptual link between law and politics, as well as the political practices through which rights are restricted, pursued, and enshrined and justice denied and/or administered. That is to say, the politics of law and justice are examined, beyond the conventional work of the judiciary. The course focuses on different themes, such as the drafting of constitutions in new states, transitional justice, revolutionary justice, the doctrine of necessity and regimes of exception, the supra-national and sub-national authorities administering justice, the role of international non-governmental organizations of human rights, etc.

## SPS 261 Comparing Political Systems (6 ECTS)

The course critically examines a number of representative political systems (i.e. Liberal democracy, Federalism, Islamic democracies, Communism and Fundamentalism, etc.), as they apply to today's world, using a multi-systemic and transnational approach. The end of the Cold War and a new world typology will be discussed. The new nation-states formed after 1989, their struggle toward democratization, the phenomenon of globalization and the dwindling role of the nation-state are topics that will be covered.

## SPS 263 Greek-Turkish Relations (6 ECTS)

After a schematic introduction to the post-war foreign policies of Greece and Turkey, the course concentrates on the Aegean dispute, the Cyprus problem, and two crucial "triangles": European Union-Greece-Turkey and Washington-Ankara-Athens.

## SPS 265 Ancient Greek Political Thought (6 ECTS)

Examination and analysis of the ancient Greek's contribution to the history of political thought. The period focused on is between the 5th and 4th centuries B.C., with emphasis on the Sophists, Socrates, Plato and Aristotle. Among other topics, the module focuses on discussions concerning the nature - law antithesis, justice and political
obligation, the types and aims of political systems, and the concepts of happiness, polis and citizen.

## SPS 266 The Political System of the European Union (6 ECTS)

The objective of the course is to familiarize students with the basic structures and functions of the EU. It places emphasis on the institutions of the EU, especially their composition, functioning and mission. It provides a historical overview of the evolution of the EU and its institutions, but the course has a contemporary focus on recent and current issues.

## SPS 267 Comparative Politics of Developing Nations

 (6 ECTS)A historical review of the development theories from the 1960s to the present will be discussed, with reference to Latin American and the African states. The relationship between Centre and periphery and the different theoretical models used to understand and explain the domestic factors of the different developing nations, their similarities and differences, will be highlighted. Reference will also be made to the developing countries' relationship to the socalled First-world nations.

## SPS 269 Basic Principals of Political Economy (6 ECTS)

The aim of the course is to familiarize students with the basic concepts and methods of political economy. Particular emphasis is placed on the theories of value, the repartition of incomes, the theories of crises, as well as the evolution tendencies of a free market economy. The state and central bank policies within contemporary economies (fiscal policy, monetary policy, foreign exchange policy), are also examined.

## SPS 272 International Organizations (6 ECTS)

The course examines the typologies and role of international organizations in the post-Cold War era, in dealing with international problems such as poverty, AIDS, disputes, environmental destruction, small arms proliferation, gender inequalities, violence against women prostitution and trafficking, etc. The role of NGOs, their relationship to the states and other regional organizations in a changing world, will also be studied.

## SPS 274 Human Rights (6 ECTS)

The course looks at the content and protection mechanisms of human rights in the Republic of Cyprus, as well as within the European Convention of Human Rights. The general theory of these rights is also considered, along with the question of the safeguard of these rights within the ambit of a potential solution to the Cyprus problem.

## SPS 275 The UN System (6 ECTS)

A historical and critical presentation and analysis of the International Organization - i.e. what preceded its
establishment and why the League of Nations failed. Examination of the different theoretical approaches (Realism/Neo-realism, Pluralism, Marxism/Internationalism, Dependency Theory and Conflict-Resolution Theory), with reference to the study of the international organization. Detailed reference to the UN Charter, the structure and different bodies of the organization and their functions and limitations. Specific reference to UN interventions in various nation-states and evaluation of the effectiveness of such interventions.

## SPS 276 Hellenistic Political Thought (6 ECTS)

Examination and analysis of the Hellenistic contribution to the history of political thought, focusing on the period from the 3rd century B.C. to the 4th century A.D., with emphasis on the work of politicians and rhetoricians, such as Cicero and Seneca, as well as philosophical schools, including the Epicureans and the Stoics. The module investigates both the continuation of the ancient Greek political thought, in which the city and its positive/moral law was the locs of attention, and the appearance of new political concepts, such as the cosmic city and natural law.

## SPS 277 Medieval Political Thought (6 ECTS)

This course analyses and examines the Medieval contribution to the history of political thought between the 5th and 15th centuries, with emphasis on the work of such important thinkers as Augustine of Hippo, Thomas Aquinas, Marsilius of Padua, and William of Ockham. The module focuses on particular discussions concerning power, authority and jurisdiction, within the broader context of investigating the relationship between the Church and the emerging states.

## SPS 278 Comparative Media Politics (6 ECTS)

The course offers a comparative examination of the interaction between the media and politics. It examines the role of the media in modern democracies, concentrating mainly on Europe and the United States. It looks into the alleged effects of the media in terms of how citizens think, in regard to policy-making and the electoral process. The course examines issues, such as media ownership, the relationship between the media and the state, the modern challenges for public television and the future of journalism in the age of blogs, Twitter, Facebook and YouTube.

## SPS 279 Comparative Public Policy (6 ECTS)

The course examines public policy in a number of countries including Germany, the UK and the USA. It analyses the factors shaping public policy and the economic, political and social consequences stemming from the implementation of these policies. It investigates particular policies which are associated with the welfare state, administrative reform and immigration policy.

## SPS 280 Gender Conflict and Peace (6 ECTS)

This course examines the gendered aspects of international conflict and peace processes. It focuses on feminist theories and theories of power in explaining the gendered aspects of inter-ethnic and international conflicts. It will examine topics and analyse them through a gender lens and gender violence perspective. Student will study certain specific cases (including the Cyprus case) and also focus on the obstacles to integrating a gender perspective into peace building processes, and how these can be overcome.

## SPS 281 Contemporary Political Thought (6 ECTS)

The course examines the development of Political Thought from Machiavelli to J.S. Mill and analyses the contribution of modern political theorists to the debates over liberty, property, political obligation, social contract, justice, rights, sovereignty and power.

## SPS 282 Political Ideologies (6 ECTS)

The course examines the role of Ideology in reforming and legitimizing constitutional forms and governmental structures. It analytically expolres the content, as well as the historical references and philosophical roots of the most significant ideologies, such as Liberalism, Socialism, Nationalism, Anarchism and Feminism.

## SPS 283 Gender and Migration (6 ECTS)

The course examines the recent (from the end of the Cold War and into the 21st century) migration phenomenon from gender, race, and age perspectives. It will utilize theories on issues of citizenship, discrimination and equal human rights. It will critically examine the liberal conceptualization of citizenship, which presumes that individual citizens have equal rights, status and duties in relation to the state and how these rights apply, or do not apply to migrants, both men and women. Both feminist theories and empirical research will be used to explain the gendered migration phenomenon in the 21 st century.

## SPS 314 Political Sociology (6 ECTS)

The course is a systematic introduction to the basic concepts, methodology and empirical research of political sociology. The social basis of politics is examined, through the analysis of different systems of political organization, different forms of political action, the role of ideology and the processes of political conflict and change. Special emphasis is placed on theoretical issues, always in relation to the analysis of empirical data from Cypriot and other societies.

## SPS 351 Research and Writing Skills (6 ECTS)

The course aims to develop and improve scholarly writing skills so that students design and carry out a research project. It explores the key stages in the development of a well-crafted research project, such as identifying a good
research question/puzzle, linking the research question with the extant literature (review), planning the research design, collecting and analysing data, while also considering the ethical implications of the research project. In parallel to the above, the course will identify strategies which help to improve scholarly writing style

## SPS 360 Globalization (6 ECTS)

The issue of globalization is examined through various disciplines and perspectives. The first question raised is whether this involves a radical rupture with, or continuation of modernity or whether it is simply an emotive rhetorical appeal. Topics discussed include the following: wester-nization, modernization and hegemony, the shifting role of the "nation-state", the role of the economy, changes in institutions like tradition and the family, transnationalism and inter-state linkages, mobility (people, goods, capital and information) and the role of the mass media.

## SPS 361 Cyprus and the European Union (6 ECTS)

The course explores basic issues and aspects of the relations of Cyprus, with the European Union beginning with the signing of the Association Agreement in 1972.
There is emphasis on the period dating to the submission of the application for membership in 1990. There is also discussion of the political aspects of EU membership and related issues in the context of Cyprus's European orientation. The structures, functioning, deepening and widening of the EU are some of the issues examined from the viewpoint of Cyprus as a member state.

## SPS 365 Plato's Political Thought (6 ECTS)

Examination and critical analysis of Plato's political theory on the basis of his writings. The course also explores Plato's reception throughout the centuries, along with the ideological appropriation of his major political theses.

## SPS 366 Social Contract Theories (6 ECTS)

The course examines the background and philosophica debate that led to the theory of the Social Contract, initially as the product of the philosophy of natural law and subsequently as an integral part in the theory of classical liberalism. It also examines how the theory of the Social Contract was transformed in the 18th century, and looks at the consequences of the critique addressed to it by the major representatives of utilitarian political philosophy.

## SPS 367 Theories of Political Justice (6 ECTS)

The course analyses the major theories of political justice, from antiquity to the present. It discusses the arguments over the source, the nature and the scope of justice, and explores its meaning. It also identifies the fundamental principles which form the foundation of justice.

## SPS 370 The Clientelist State (6 ECTS)

The course examines the historical roots, the main characteristics and the basic structure of the "clientelist state". It focuses on possible explanations for the establishment of the clientelist state. It seeks to understand how the clientelist state shapes the political system, political culture and political reform. It analyses, on a comparative basis, Cyprus and other cases in Southern Europe and Latin America

## SPS 373 The Cyprus Problem (6 ECTS)

A multi-disciplinary approach (historical, sociological, social anthropological, social psychological and international relations perspectives) to the Cyprus conflict. Causes and kinds of international conflicts and the role of International law. Methods and tools of resolving international conflicts, with specific reference to the Cyprus negotiations-official and unofficial diplomacy. Reference to third-party interventions and their effectiveness and limitations in the case of Cyprus.

## SPS 376 Conflict Resolution (6 ECTS)

Introduction to the theories and practice of the interdisciplinary field of the science and art of conflict resolution. Basic concepts will be outlined and the conflict theories and causes of war will be presented. Analysis of different kinds of conflicts and the causes of ethnic and international disputes will be discussed. Official and unofficial diplomacy, their contribution and limitations and practices in various case studies will be studied. Presentation of tools used in the diagnosis, analysis, and intervention of third parties in facilitating the resolution of protracted international disputes, such as that in Cyprus. Simulation exercises will also be used.

## SPS 377 Power and Legitimation in International Politics (6 ECTS)

This course examines how the power of state and non-state actors is legitimated and challenged in international politics. It engages with conceptual problems and theoretical discussions around questions of power, legitimacy and legitimation and focuses on the following topics: the selective use and interpretation of the rules of International law; the legal and illegal use of force; the role of great and regional powers in maintaining or endangering international order; the creation of states, military bases and regimes of exception; the use of soft power and public diplomacy; and the management of the global commons.

## SPS 378 Economy and Politics (6 ECTS)

Political and economic thought are interrelated and interdependent. Liberal theories are related to the classical and neo-classical economy, socialist ideas are related to "the critique of political economy", etc. The aim of the course is a more profound understanding of the competing
political ideas/ideologies of contemporary times, through the presentation of the principal historical schools of economic thought.

## SPS 380 Natural Rights Theory (6 ECTS)

The course examines an array of issues related to theories of natural rights in the work of a variety of philosophers such as Thomas Aquinas, Hugo Grotius, Samuel Pufendorf, John Locke and others. The nature and scope of natural rights, their role in the overall theories of the philosophers, the conditions under which people refer to and defend these rights as part of a well-constituted political system, as well as the historical and philosophical frameworks within which natural rights theory operates will be discussed. The course also investigates the relation of the natural rights theory with the philosophical tradition of natural law.

## SPS 382 Contemporary Political Theory (6 ECTS)

The course examines the production of political theory, since John Stuart Mill's constructive criticism of classical possessive liberalism. Basic concepts such as liberty and justice, rights and obligations, social contract and property are revisited. The contribution of John Rawls and Robert Nozick to these discussions is the focus of our review of twentieth-century political thought.

## SPS 383 Political Parties and Elections (6 ECTS

Although most citizens of most countries today are dissatisfied with political parties, among scholars there is virtual unanimity that parties are essential for making any kind of democracy work. However, there is no consensus about the nature of the parties that democracy requires. Political Parties and Elections, is a political science course focusing on political parties as organizations of mobilization, and on elections as democratic means of citizen expression, as well as the means by which states can control their citizenry. One goal of this course is to expose students to the variety of parties and party systems, as well as electoral systems that can be found in Europe today. A second goal is to introduce basic comparative concepts and theories. The course studies political parties, first, at a systemic level and, then, at an organizational level. The first approach is associated primarily with understanding party systems: their origins, patterns, stability, and latterly instability. In the 1980 s, the attention is switched to the organizational level, trying to get inside the 'black-box' of the party organization, to understand how parties compare across nations and over time, and assessing the question of their possible demise. At the end of the course, students should have developed the following knowledge and skills:

- The meaning and definition of parties, party systems and electoral systems.
- Explanations for why party systems are/were stable and how they might be categorized
- Examining parties from inside
- The key analytical and theoretical skills for understanding party politics in Europe.


## SPS 384 Enlightenment Political Thought (6 ECTS)

Introduction to the classic texts of political thought written during the Age of Enlightenment, with emphasis on the ideas of reason and progress, liberty, equality and nature. Examination of the connection between Enlightenment ideas and the American and French revolutions at the end of the 18th century, as well as the conflict between Enlightenment and Romanticism.

## SPS 385 Utopian Socialism and Marxism (6 ECTS

Examination and analysis of nineteenth-century socialist thought, with particular emphasis on the classic distinction between "utopian" and "scientific" socialism. The differences between the various socialist approaches are examined, in relation to the proletariat's capacity as an agent of change, the role of revolution in social reform, and the role of capitalism in social development

## SPS 386 Right-wing Radicalism (6 ECTS)

The course examines the historical roots, evolution and theoretical explanations for right-wing radicalism. It focuses in the ascendance of this phenomenon in the interwar years and discusses its evolution in the post-war period. It analyses and compares individual cases of rightwing radicalism and the factors explaining its rise in some periods, especially in western Europe.

## SPS 387 Radical and Revolutionary Left (6 ECTS)

The course examines the historical origins, evolution and theories explaining left-wing radicalism. It focuses on the growth of this phenomenon after the Russian Revolution, emphasizing recent forms, notions and theoretical approaches of radical left movements, parties and organizations, as they have evolved since May 1968.

## SPS 388 Environmental Politics (6 ECTS)

This course examines the politics of state and non-state actors in relation to the exploitation, protection and management of the environment. It deals, inter alia, with the political theory of ecology and the international conventions on the environment, and focuses on topical issues such as global warming, deforestation, rising sealevels, waste management, overexploitation and sustainable development, environmental refugees, etc.

## SPS 389 Politics and the Arts (6 ECTS)

This course examines how the arts can be used both to promote political meanings and messages, and to reinterpret conventional practices while projecting alternatives views of the political. Specifically, this course focuses on the relationship between politics and
aesthetics, and analyses sites and works of art, including the performing and visual arts, as well as literature.

## SPS 390 Parties, Politics and Democracy in Southern Europe (6 ECTS)

The course examines politics in southern European countries, including Greece, Spain, Portugal, Italy and Cyprus. It focuses on the historical evolution of democratic institutions, and analyses the state structures, party systems and political culture of these countries. It looks into how the differences in the historical evolution of democracy have shaped contemporary politics in southern Europe. The course examines phenomena like the clientelist state, political polarization, the collapse of the party system and radicalism. It examines how these phenomena affect or are affected by economic crises.

## SPS 391 Marx's political thought (6 ECTS)

This course presents the evolution of Marx's political thought from the 1844 Manuscripts 1844 to The Capital. It poses a number of questions: Is the political "superstructure" a simple, mechanical reflection of the social and economical "basis"? Or is the relation between "superstructure" and "basis" more complex than a question of reflection? What is the role of the political subject in social activity and how is it articulated within the class struggle of modern capitalist societies? In this concept, the course specifically analyses the notions of alienation, fetishism of commodity, religion, social progress, personal freedom and state.

## SPS 393 International Relations Theories (6 ECTS)

The course examines basic concepts, theories and approaches of international relations, through the work of prominent scholars. There is emphasis on key issues and levels of analysis, that will provide a better understanding of the structures, processes and factors that form the world political scene and affect the behaviour of states and other international actors.

## SPS 394 Politics of Authoritarian Regimes (6 ECTS)

The course invites students to think critically about all kinds of political systems, but primarily non-democratic ones. In exploring politics in authoritarian regimes, we reflect on fundamental questions about politics. What is power? How do we recognize power in people? How do governments hold onto power and how do they lose it? Is liberal democracy an inevitable outcome of social change? In the first part of the course, we explore important concepts, theories, and paradigms in the study of regimes and regime change. In the second part of the course, we consider some important non-democratic countries/regions of the world and explore how autocrats come to power and hold on to power. In the second part of the course, we examine the nuts and bolts of the authoritarian political machine: who governs in autocracies and how? Topics include repression, cooptation, redistribution, propaganda and censorship.

SPS 396 European Foreign and Security Policy (6 ECTS)
The course examines the main structures, factors, processes and parameters shaping and implementing foreign and security policy in Europe. Emphasis is placed on the EU, but individual states are also examined. The approach of the course is primarily historical and theoretical, but there is some focus on the prospects and potential of the EU that play a role in the international political scene. In the context of EU Common Foreign and Security Policy, the role of Cyprus is also examined.

## SPS 450 Placements in Organizations (12 ECTS)

This is an elective course carried out during the Summer Semester of the 3rd year of studies. In order to enroll to the course, a minimum grade point average 7.5 and written consent from the Academic Coordinator of the course "Placements in Organizations" are required. In case students do not enroll to the course, they must either choose two other courses from the Specialization Courses list or Dissertation.

## SPS 451 Special Issues in International Relations (6 ECTS)

The course is presented as a seminar and examines in depth major contemporary issues in international relations. It offers students an opportunity to improve their capabilities and skills in theoretical thinking and empirical research.

## SPS 452 Special Topics in Comparative Politics (6 ECTS)

The course is presented as a seminar and examines in depth specific contemporary phenomena in comparative politics. It gives students the opportunity to improve their capabilities in theoretical and empirical research in issues related to comparative politics.

## SPS 453 Strategy and War (6 ECTS)

This course examines the theory and practice of strategy, as well as the causes and consequences of war. Following an introduction to classic and contemporary theorists of strategy and war, it focuses on issues such as the relationship between war, law and morality, the character of interstate, world and civil wars, the new wars, the representation of war, coercive diplomacy, weapons of mass destruction, terrorism, child soldiers, etc.

## SPS 454 Global Security ( 6 ECTS)

This course examines security, as it extends to transnational concerns with global implications, leading frequently to multilateral collaborations. The study of global security includes conventional and critical security studies, and is therefore not only limited to state-centric military-anchored matters, but also covers human security, regional security complexes, and widened security agendas, including, inter alia, concerns about the environment, society, the economy, migration, violence, health, resource scarcity, etc.

## SPS 455 Special Issues in Foreign Policy (6 ECTS)

The course is presented as a seminar and examines in depth contemporary and current issues in foreign policy analysis. It gives students the opportunity to improve their capabilities in theoretical and empirical research in issues related to foreign policy.

## SPS 456 Global Commons (6 ECTS)

This course examines the involvement of international actors in the definition, exploitation and management of the global commons, that is to say, areas over which states have no sovereignty or only limited sovereignty. It introduces and interprets the value conflict between "creeping territoriality" and "world heritage of humankind", and focuses, inter alia, on the cases of the oceans, the Arctic, Antarctica, international rivers, cultural heritage, biodiversity, endangered species, and outer space.

## SPS 457 Democratization (6 ECTS)

Why do countries democratize? What are the barriers to democratization? What role can international actors play in promoting democracy? In this course, students will engage with cutting edge research that seeks to answer these questions. We will first focus on the barriers to democratization, and the symptoms of "low quality" democracy that plague many countries around the world. We will then explore how the international community can best promote democracy, focusing on particular tools of democracy promotion, including election monitoring, foreign aid, and post-conflict reconstruction. We will consider the many challenges associated with the external imposition of democracy, as well as the reasons for democracy promotion "fatigue" on the part of Western countries.

## SPS 458 Human Rights and Reconciliation in Divided Societies (6 ECTS)

The course introduces students to the policies of accountability deployed by deeply divided societies in the aftermath of gross human rights violations (i.e. civil wars, dictatorship) in order to foster reconciliation. By exploring and comparing countries like Cyprus, Northern Ireland, Argentina, Lebanon, etc., the course assesses the effectiveness of different reconciliation mechanisms, including international criminal tribunals, truth commissions, apologies and reparations to victims' groups.

SPS 463 Hegemony, Crisis and the European Union (6 ECTS)
The process of European integration does not evolve in a linear way nor is it a function of a stable and predetermined orientation. The volatile power dynamics between the member states, which determine their official stance towards the European institutional framework on the basis of their internal needs for social consensus, has a critical role in European affairs. The international economic crisis has generated friction between the member states,
which have suffered asymmetrically its consequences. The crisis has brought to the surface the structural problems of the EU and especially the Eurozone, as well as the different orientations of the member states with regards to its institutional future. New national hegemonic aspirations have been manifested, which caused an uncertain consensus and have undermined the way the Union has been politically legitimized. The course focuses on the composition of the EU in the face of aspirations for hegemonic dominance in the new context shaped by the international economic crisis.

## SPS 464 Ethics of International Relations (6 ECTS)

Part One offers a schematic introduction to fundamental ethical theories and the major theories of international relations, as well as a brief introduction to the main theoretical approaches of International Ethics. Part Two investigates central ethical concerns such as human rights, foreign aid, military interventions, peacekeeping operations, and global environmental issues.

## SPS 465 Public Diplomacy (6 ECTS)

This course examines how diplomatic actors present ideas, values and images in order to influence "local" and "foreign" audiences. It will concentrate on the analysis of the daily public diplomacy of foreign ministries, embassies, international organizations and personalities, as well as on specific aspects of public diplomacy, like the instrumental use of protocol, diplomatic signaling, branding and decoding, and visual, cultural and digital diplomacy. Finally, the course will examine the extent to which diplomacy is being democratized through the pluralism of actors and their everyday interactions or if public diplomacy creates new asymmetries, hierarchies and marginalizations

## SPS 466 The European Union as a Global Power (6 ECTS)

The course investigates the European Union's emerging role in the New International System. Without ignoring the issues of defense and security, the main emphasis is placed on the Union's activities in the areas of foreign aid, environmental concerns, peacekeeping and humanitarian missions, the role of the EU in international organizations and its relations with the United States.

## SPS 467 Gender and International Organizations (6 ECTS)

The course focuses on the gender equality policy of the European Union, the Council of Europe and the United Nations. The aim of this course is to provide students with theoretical and empirical tools. While there is significant coverage of EU policy and practices, the course also seeks to expose students to international events and issues. Students are expected to acquire a broad understanding of the gender dimension, both as an adaptation pressure for domestic policy and as a useful policy instrument for forward-looking international strategies.

## SPS 468 Critical Theory (6 ECTS)

Critical Theory inherits and critically renews German political philosophy, in particular Hegel's and Marx's work. The course focuses on the contribution of Critical Theory to the analysis of the Enlightenment, contemporary western democracy and totalitarianism in its contemporary "traditional" and original forms.

## SPS 481 Special Issues in Political Theory (6 ECTS)

The course explores major issues in political thought, through the writings of selected political philosophers. During the course, students analyse one or more philosophers, by reading their original works as well as critical material.

## Journalism

## JOU 100 Introduction to Communication (8 ECTS)

In this introductory course, we examine radio, cinema television and the internet in a wider historical/social context as technologies that have largely influenced economic, cultural and social developments in the modern world. In this context, journalism emerged as a function, social phenomenon, and professional activity. The invention of printing press is viewed as an important breakthrough in shaping the modern Western world. The Italian Renaissance, the Protestant Reformation, the French Enlightenment, the Industrial Revolution, the Nuclear Revolution as well as the information revolution are examined as communication developments that shaped modern societies.

## JOU 102 Journalism and Technology (8 ECTS

The course explores the important changes that the journalism industry has experienced in connection with wider technological, social and cultural upheavals that overturn information flows and consumption patterns. In particular, the digital age recommends multiple reversals in news editing and distribution models. In addition, this course examines the potential of different technologies in the production and distribution of media content. At the same time it explores the roles of users in search engines within digital environments. Also, it provides basic capabilities for designing news applications through digital tools available to students.

## JOU 211 Journalism Ethics (6 ECTS)

This course examines some of the basic principles that have influenced codes and behaviors of professional journalists as news providers. The course explores the concepts of truth and objectivity. Furthermore, it examines journalistic dependencies and incompatibilities in media markets. Students get acquainted with professional codes of conduct along with European Communication

Guidelines that European journalists use as a standard framework for practicing journalism.

## JOU 151 Quantitative Data Analysis in Journalism (8 ECTS)

The course examines the basic principles of statistica analysis of social and journalistic data. It focuses on techniques that are available not only to social scientists but also to media professionals (journalists, analysts, presenters, etc.) who collect data, turn them into variables, analyze them and present them to different segments of consumers. The course presents some of the methods and techniques of quantitative analysis which enhance our understanding of the world.

## JOU 212 and JOU 213 News Writing I and II (6 ECTS)

These two courses provide a foundation of journalistic writing as students become acquainted with different types of news narratives and popular media discourses. The classes familiarize students with journalistic forms of expression as they learn to follow general rules of grammar, syntax while evolving into competent writers and storytellers.

## JOU 214 Reporting I and JOU 314 Reporting II (6 ECTS)

These courses present journalistic research techniques, such as news selection criteria, searching for sources, interviewing, news writing and distribution. In order to train future journalists, this course provides the background for critical evaluation of complex social issues and media agenda, and the production of simple and coherent news stories. Students are expected to acquire professional skills while becoming competent in identifying newsworthy information and producing quality news content.

## JOU 301 Journalism in Cyprus (6 ECTS)

The course examines the history of Cypriot journalism, the first newspapers in the country, the leading journalists, the establishment of Cyprus Broadcasting Corporation, as wel as the latest developments in electronic, audiovisual media and the internet. In addition, the course focuses on the modern media industries across the digital content industry, their interaction with Cypriot society, and the prospects of the digital media market, including organizations that provide entertainment content.

## JOU 311 New Media and Alternative Journalism (6 ECTS)

This course examines the emergence of new forms of journalism that evolve within the contexts of traditional media as well as in hybrid media environments. As autonomous journalists work outside mainstream media settings, new forms of journalism gain ground, triggering new waves of digital experimentation both in content production and distribution. Journalistic transformations include new professional practices that apply pressure on
traditional organizations while encouraging new influences to users, consumers and independent producers of digital content.

## JOU 381 Political Communication (6 ECTS)

The course examines how political institutions have evolved both geographically and culturally. This course examines how political cultures respond to the emerging needs of modern societies. Political parties coexist with the media, developing symbiotic relationships, which inevitably shape political environments. Often, this coexistence between political parties and media institutions is described as a digital, tele-democracy. This particular institutional symbiosis concerns citizens and parties as it shapes modern democracies.

## JOU 382 Media Influences and Theory (6 ECTS)

The course examines social science theories and models as systematic processes through which scientists ask questions and promote scientific knowledge. The course presents the effects and uses of media across different audiences. Although social scientists present a rich body of information about traditional, mass media, there is an emerging body of evidence that applies to 21st century developments that apply to emerging digital media and their effects on global users and consumers of information.

## JOU 315 Radio (7 ECTS)

This course familiarizes students with audio production. Furthermore, students become acquainted with the basics of radio production, that is collecting, editing and producing content for radio audiences. Students acquire hands-on experience and technical training that get them involved in all aspects of radio production - preparation, research, editing, dissemination.

## JOU 450 Data Journalism (6 ECTS)

In the digital era, the role of algorithmic data has emerged as a key factor in the production and dissemination of information. Furthermore, algorithmic data influence processes of creation and dissemination of journalistic content. As artificial intelligence applications emerge as an important factor in defining information paths and forms of interaction between digital content and consumers, journalists and producers of digital content are invited to understand the nature of algorithmic functions in the context of digital interactions.

## JOU 401 Sports Journalism (6 ECTS)

The course examines the features of contemporary sports journalism (press, radio, television, internet). It examines the role and practices of sports journalists in the wider social environment (racial and gender discrimination, juvenile delinquency, etc.). It also provides the necessary
knowledge and skills for the production and editing of various forms of sports reporting.

## JOU 457 Journalism and Images (6 ECTS)

This course explains the role of the image in the production of journalistic content, the role of photographs in print and online journalism and presents the historical evolution of film and video in relation to the history of journalism.

JOU 453 Research Methods in Communication (6 ECTS)
The course aims at familiarizing students with the basic quantitative and qualitative methods and research techniques applied to the broader field of communication. In this context, various forms of interviews, media content and discourse analysis as well as field and news room analysis are presented. The methodological tools provide important techniques for collecting primary data that is useful both for media professionals and for social scientists in communication.

## JOU 481 Media and Society (6 ECTS)

The course explores the different forms of entertainment which are promoted by media industries as forms of popular culture. At the same time, the connections among journalistic content and popular culture are examined. The course explores various cultural industries as leisure entertainment while examining the intersection between journalism, infotainment and entertainment as content that blends together in hybrid digital formations.

## JOU 458 Television Journalism (7 ECTS)

The course provides a theoretical and technical foundation for developing news content for television. In terms of theory, it presents the key characteristics of television news genres from the early days of broadcast news until today. Furthermore, the course provides laboratory experience in training students in all aspects of news gathering, editing and disseminating news.

Descriptions for courses from the three cooperating departments are not included (these can be found elsewhere in the University Prospectus).

## ANALYTICAL PROGRAMME OF STUDIES FOR POLITICAL SCIENCE DEGREE

## CORE COURSES IN POLITICAL SCIENCE

## 14 Courses x 6 ECTS +2 Courses x 8 ECTS $=100$ ECTS

SPS 151 Introduction to Political Science
SPS 152 Comparative Politics
SPS 153 International Relations
SPS 154 Political Theory
SPS 155 Foreign Policy
SPS 156 European Integration
SPS 157 Political Analysis and Methodology (8 ECTS)
SPS 232 Gender, Power and Politics
SPS 251 The Political System of Cyprus
SPS 261 Comparing Political Systems
SPS 266 Political System of the European Union
SPS 269 Basic Principals of Political Economy (8 ECTS)
SPS 281 Contemporary Political Thought
SPS 314 Political Sociology
SPS 351 Research and Writing Skills
SPS 377 Power and Legitimation in International Politics

## ORGANIZATION AND COMMUNICATION SKILLS INTEGRATED IN THE CORE COURSES PROGRAMME

3 Courses x 5 ECTS + 1 Course $\times 6$ ECTS $=21$ ECTS
Foreign Languages I
Foreign Languages II
Foreign Languages III
CS 001 Introduction to Computer Sciences (6 ECTS)

## SUPPORT AND SPECIALIZATION COURSES

16 Courses x 6 ECTS $=96$ ECTS or 14 courses + THESIS I \& II x 6 ECTS = 96 ECTS or 14 courses + Placements in Organizations x 6 ECTS = 96 ECTS

## International Relations

SPS 263 Greek-Turkish Relations
SPS 268 Cyprus Foreign Policy
SPS 272 International Organizations
SPS 274 Human Rights
SPS 275 The U.N.O. System
SPS 280 Gender Conflict and Peace
SPS 373 The Cyprus Problem
SPS 376 Conflict Resolution
SPS 393 International Relations Theories
SPS 451 Special Issues in International Relations
SPS 453 Strategy and War
SPS 454 Global security
SPS 455 Special Issues in Foreign Policy
SPS 456 Global Commons
SPS 457 Democratization
SPS 464 Ethics of International Relations
SPS 465 Public Diplomacy
SPS 467 Gender and International Organizations

## European Union

SPS 361 Cyprus and the European Union
SPS 362 Politics of the European Union
SPS 364 Europe and the Mediterranean
SPS 396 European Foreign and Security Policy
SPS 461 European Union Special Issues
SPS 463 Hegemony, Crisis and the European Union
SPS 466 The European Union as a Global Power

## Comparative Politics

SPS 267 Comparative Politics of Developing Nations
SPS 278 Comparative Media Politics
SPS 279 Comparative Public Policy
SPS 283 Gender and Migration
SPS 360 Globalization
SPS 370 The Clientelist State
SPS 378 Economy and Politics
SPS 383 Political Parties and Elections
SPS 386 Right-wing Radicalism
SPS 387 Radical and Revolutionary Left
SPS 388 Environmental Politics
SPS 390 Parties, Politics and Democracy in Southern Europe
SPS 394 Politics of Authoritarian Regimes
SPS 452 Special Topics in Comparative Politics
SPS 458 Human Rights and Reconciliation in Divided Societies

## Political Theory

SPS 256 Law and Politics
SPS 265 Ancient Greek Political Thought
SPS 276 Hellenistic Political Thought
SPS 277 Medieval Political Thought
SPS 282 Political Ideologies
SPS 365 Plato's Political Thought
SPS 366 Social Contract Theories
SPS 367 Theories of Political Justice
SPS 368 Hegel's Political Thought
SPS 380 Natural Rights Theory
SPS 381 Theories of Liberalism
SPS 382 Contemporary Political Theory
SPS 384 Enlightenment Political Thought
SPS 385 Utopian Socialism and Marxism
SPS 389 Politics and the Arts
SPS 391 Marx's Political Thought
SPS 468 Critical Theory
SPS 481 Special Issues in Political Theory
Degree Thesis*
SPS 498 Degree Thesis I
SPS 499 Degree Thesis II

## Placements**

SPS 450 Placements in Organizations (12 ECTS)

## ANALYTICAL PROGRAMME OF STUDIES FOR POLITICAL SCIENCE DEGREE (continuation)

## ELECTIVES FROM OTHER SUBJECT AREAS

- Courses from other Departments equal to 11 ECTS
- SPS 101 Introduction to Sociology 6 ECTS
- 1 course from Sociology Program 6 ECTS

GRAND TOTAL: 240 ECTS

* Degree Thesis:

Thesis is optional and is completed during the fourth year of studies. A general average grade of 7.0 is required for writing a thesis. Instead of writing a thesis, a student can take two courses from Support and Specialization Courses.
** Placements in Organizations:
This is an elective course carried out during the summer semester of the third year of studies. In order to enroll, a grade point average of 7.5 or above and written consent from the academic coordinator of
"Placements in Organizations" are required. The course is credited with 12 ECTS. In case students do not enroll to the course, they must either choose two other courses from the Specialization Courses list or Dissertation.

## CONTENT OF THE PROGRAMME IN POLITICAL SCIENCE

|  | ECTS |
| :--- | ---: |
| 1st YEAR |  |
| 1st Semester |  |
| SPS 151 Introduction to Political Science | 6 |
| SPS 152 Comparative Politics | 6 |
| SPS 153 International Relations | 5 |
| Foreign Languages I | 6 |
| CS 001 Introduction to Computer Sciences | 29 |
| TOTAL |  |
| 2nd Semester | 6 |
| SPS 154 Political Theory | 6 |
| SPS 155 Foreign Policy | 6 |
| SPS 156 European Integration | 8 |
| SPS 157 Political Analysis and Methodology | 5 |
| Foreign Languages II | 31 |
| TOTAL |  |
| 2nd YEAR | 5 |
| 3rd Semester | 6 |
| Foreign Languages III | 6 |
| SPS 101 Introduction to Sociology | 6 |
| SPS 232 Gender, Power and Politics |  |
| SPS 251 The Political System of Cyprus |  |
| SPS 261 Comparing Political Systems |  |
| TOTAL | 29 |
| 4th Semester |  |
| SPS 266 Political System of the European Union | 6 |
| SPS 269 Basic Principals of Political Economy | 8 |
| SPS 281 Contemporary Political Thought | 6 |
| SPS 377 Power and Legitimation in International Politics | 6 |
| One Course from Support and Specialization | 6 |
| TOTAL | 32 |

## ANALYTICAL PROGRAMME OF STUDIES FOR SOCIOLOGY DEGREE

## CORE COURSES IN SOCIOLOGY

## 17 Courses x 6 ECTS + 2 Courses x 7 ECTS + 1 Course x <br> 8 ECTS = 124 ECTS

SPS 101 Introduction to Sociology
SPS 102 Classical Sociological Theories
SPS 105 Introduction to Social Anthropology
SPS 146 Introduction to Qualitative Social Science Methodology (7 ECTS)
SPS 147 Introduction to Quantitative Social Science Methodology (7 ECTS)
SPS 211 Contemporary Sociological Theories
SPS 212 History of Sociology
SPS 221 Sociology of Deviance
SPS 231 Social Stratification
SPS 241 Cyprus Society
SPS 243 Contemporary Issues in Social Policy
SPS 247 Quantitative Research Methods in Social Sciences
SPS 269 Basic Principles of Political Economy (8 ECTS)
SPS 301 Cultural Sociology
SPS 302 Economic Sociology
SPS 314 Political Sociology
SPS 333 Sociology of Religion
SPS 327 Contemporary Trends in Social Theory
SPS 348 Qualitative Research in Social Science
SPS 401 Global Society

## CORE COURSES ON LINGUISTIC AND COMPUTATIONAL SKILLS

3 Courses $\times 5$ ECTS +1 Course $\times 6$ ECTS $=21$ ECTS
Foreign Languages I
Foreign Languages II
Foreign Languages III
CS 001 Introduction to Computer Sciences (6 ECTS)

## SPECIALIZATION COURSES

(In depth and Interdisciplinary Skills)
12 Courses $=72$ ECTS, or 10 Courses + THESIS I \& II $=72$ ECTS or 10 Courses + THESIS I \& II = 72 ECTS
SPS 213 Youth and Society
SPS 215 Volunteering: Theory and Practice
SPS 232 Gender, Power and Politics
SPS 244 Citizenship and Social Theory
SPS 245 Sociology of Gender

SPS 246 Critical Theory
SPS 300 Higher Education, Policy and Society
SPS 303 Modernity and Postmodernity
SPS 304 Sociology of Mass Media
SPS 305 Sociology of Tourism
SPS 306 Social Movements
SPS 307 Sociology of the Family
SPS 311 Sociology of Minorities
SPS 315 Ethnography
SPS 317 Identity and Difference
SPS 319 Anthropology of Religion
SPS 320 Ethnicity and Nationalism
SPS 322 Political Anthropology
SPS 324 Transnationalism and International Migration
SPS 325 Social Theory and Law
SPS 326 Sociology of Health
SPS 328 Sociology of Urbanization
SPS 329 Sociology of Technology
SPS 330 Sociology of Knowledge
SPS 331 Sociology of Work
SPS 332 Social Problems
SPS 336 European Economic Integration
SPS 337 Sociology of the Ecology
SPS 340 Social Theory and Cinema
SPS 347 Myths, Misconceptions and the Misuse of Empirical Research in Social Sciences
SPS 349 Applied Research in Social Sciences
SPS 402 Truth, Memory and Reconciliation: Comparative Sociological Perspectives
SPS 403 Historical Sociology
SPS 405 Contemporary Issues and Social Theory I
SPS 406 Contemporary Issues and Social Theory II
SPS 419 The Image in Contemporary Society
SPS 420 European Unification \& European Culture
SPS 422 Social Intervention and Change
SPS 448 Degree Thesis I*
SPS 449 Degree Thesis II*
SPS 450 Placements in Organizations (12 ECTS)
ELECTIVES FROM OTHER SUBJECT AREAS

- Courses from other Departments equal to 11 ECTS
- SPS 151 Introduction to Political Science 6 ECTS
- 1 Course from Political Science Programme 6 ECTS

GRAND TOTAL: 240 ECTS

[^3]
## CONTENT OF THE PROGRAMME IN SOCIOLOGY

ECTS

## 1st YEAR

## 1st Semester

SPS 101 Introduction to Sociology

## SPS 102 Classical Sociological Theories

Foreign Languages I
SPS 151 Introduction to Political Science

## CS 001 Introduction to Computer Sciences

## TOTAL

## 2nd Semester

SPS 105 Introduction to Social Anthropology
SPS 146 Introduction to Qualitative Social Science Methodology
SPS 147 Introduction to Quantitative Social Science Methodology
SPS 211 Contemporary Sociological Theories 6
Foreign Languages II 5
TOTAL

## 2nd YEAR

3rd Semester
Foreign Languages III 5
SPS 212 History of Sociology 6
SPS 231 Social Stratification 6
SPS 241 Cyprus Society 6
SPS 247 Quantitative Research Methods in Social Science 6
TOTAL 29

## 4th Semester

SPS 221 Sociology of Deviance
SPS 269 Basic Principles of Political Economy
SPS 301 Cultural Sociology

## SPS 302 Economic Sociology

6SPS 348 Qualitative Research in Social Science ..... 6
TOTAL ..... 32ECTS
3rd YEAR5th Semester
SPS 314 Political Sociology ..... 6
SPS 327 Contemporary Trends in Social Theory ..... 6
SPS 333 Sociology of Religion ..... 6
Two Courses from Specialization ..... 12
TOTAL ..... 30
6th Semester
SPS 243 Contemporary Issues in Social Policy ..... 6
SPS 401 Global Society ..... 6
One Course from Electives from other subject areas ..... 5
Two Courses from Specialization ..... 12
TOTAL ..... 30
Summer Semester
SPS 450 Placements in Organizations ..... 12
4th YEAR
7th Semester
SPS 448 Degree Thesis I ..... 6
One Course from Electives from other subject areas ..... 6
Three Courses from Specialization ..... 18
TOTAL ..... 30
8th Semester
SPS 448 Degree Thesis II ..... 6
One Course from Electives from other subject areas ..... 6
Three Courses from Specialization ..... 18
TOTAL ..... 30
GRAND TOTAL ..... 240

## ANALYTICAL PROGRAMME OF STUDIES FOR JOURNALISM DEGREE

## CORE COURSES IN JOURNALISM

3 Courses $\times 8$ ECTS +2 Courses x 7 ECTS +14 Courses x 6 ECTS $=122$ ECTS
JOU 100 Introduction to Communication (8 ECTS)
JOU 102 Journalism and Technology (8 ECTS)
JOU 151 Quantitative Data Analysis in Journalism (8 ECTS)
JOU 211 Journalism Ethics
JOU 212 News Writing I
JOU 213 News Writing II
JOU 214 Reporting I
JOU 301 Journalism in Cyprus
JOU 311 New Media and Alternative Journalism
JOU 314 Reporting II
JOU 315 Radio (7 ECTS)
JOU 381 Political Communication
JOU 382 Media influences and Theory
JOU 401 Sports Journalism
JOU 450 Data Journalism
JOU 453 Research Methods in Communication
JOU 457 Journalism and Images
JOU 458 Television Journalism (7 ECTS)
JOU 481 Media and Society
CORE COURSES FROM THE DEPARTMENT OF SOCIAL AND POLITICAL SCIENCES

## POLITICAL SCIENCE

## 4 Courses x 6 ECTS $=24$ ECTS

SPS 151 Introduction to Political Science
SPS 153 International Relations
SPS 251 The Political System of Cyprus
SPS 281 Modern Political Thought

## SOCIOLOGY

5 Courses $\times 6$ ECTS $=30$ ECTS
SPS 101 Introduction to Sociology
SPS 241 Cypriot Society
SPS 304 Sociology of Media
SPS 314 Political Sociology
SPS 332 Social Problems

## HISTORY

2 Courses x 5 ECTS = 10 ECTS
HIS 181 Introduction to European History (1789-1918)
HIS 280 History of Cyprus (1878-1974)
HIS 108 Introduction to Modern Greek History
HIS 225 Political History of Modern Greece
HIS 305 Cypriot Democracy 1959-1974
BYZANTINE AND MODERN GREEK STUDIES
1 Course x 5 ECTS = 5 ECTS
BMG 390 Journalism and Literature

BUSINESS AND PUBLIC ADMINISTRATION
1 Course x 6 ECTS = 6 ECTS
BPA 458 Social Media Marketing

## ECONOMICS

1 Course x 6 ECTS = 6 ECTS
ECO 101 Introduction to Economics

## CORE COURSES FROM OTHER DEPARTMENTS

## 3 Courses x 5 ECTS = 15 ECTS

Foreign Language I
Foreign Language II
Foreign Language III

## JOURNALISM ELECTIVES AND SPECIALIZATION COURSES

1 Course x 6 ECTS = 6 ECTS
JOU 320 Cultural Studies
JOU 321 Social Movements and New Media
JOU 322 Democracy and Digital Media
JOU 333 Political Economy of Media
JOU 420 Documentary
JOU 421 Special Issues in Journalism

## ELECTIVES

- Courses worth 16 ECTS
- 10 ECTS from other departments

Indicative Courses:
LAW 005 Criminology
LAW 105 Constitutional Law
LAW 171 European Legal Tradition
UM 260 History of Turkey
Or other Courses

- 1 Course from the Department of Social and Political

Sciences 6 ECTS
SPS 152 Comparative Politics
SPS 156 European Integration
SPS 157 Political Analysis and Methodology
SPS 272 International Organizations
SPS 320 Nationality and Nationalism
SPS 329 Sociology of Technology
SPS 361 Cyprus and the European Union

## SPS 450 Placements in Organizations 12 ECTS

This is an elective course carried out during the summer semester of the third year of studies. In order to enroll to the course, a grade point average of 7.5 or above and written consent from the a cademic coordinator of "Placements in Organizations" are required. The course is credited with 12 ECTS. Students who pass the course are exempted from the courses SPS 314 and SPS 332.

## CONTENT OF THE PROGRAMME IN JOURNALISM

## 1st YEAR

1st Semester
JOU 100 Introduction to Communication
SPS 151 Introduction to Political Science
SPS 101 Introduction to Sociology
Foreign Language I
TOTAL
2nd Semester
JOU 102 Journalism and Technology
JOU 211 Journalism and Ethics
BMG 390 Journalism and Literature
SPS 241 Cypriot Society
Foreign Language II
TOTAL

## 2nd YEAR

3rd Semester
JOU 151 Quantitative Data Analysis in Journalism JOU 212 News Writing I
History Elective from list
SPS 153 International Relations
Foreign III
JOU 100 Introduction to Communication
SPS 151 Introduction to Political Science
ECTS
ECTS
1st Semester

## History Elective from list

SPS 101 Introduction to Sociology
Foreign Language I
TOTAL
2nd Semester
JOU 102 Journalism and Technology
JOU 211 Journalism and Ethics
BMG 390 Journalism and Literature
Foreign Language II
TOTAL
TOTAL
4th Semester
JOU 213 News Writing II
JOU 214 Reporting I
SPS 281 Modern Political Thought
Elective Course
TOTAL
JOU 457 Journalism and Images ..... 6
SPS 314 Political Sociology ..... 6
Journalism Elective ..... 6
TOTAL ..... 30
8th Semester
JOU 453 Research Methods in Communication ..... 6
JOU 481 Media and Society ..... 6
JOU 458 Television and Journalism ..... 7
SPS 332 Social Problems ..... 6
Elective Course ..... 5
TOTAL ..... 30
GRAND TOTAL ..... 240


## APPENDIX

Academic Calendar
Telephone, Fax and E-mail Directory

Academic Calendar 2022-2023

|  | FALL SEMESTER 2022-2023 | SPRING SEMESTER 2022-2023 |
| :---: | :---: | :---: |
| REGISTRATION WEEK | 1-2 September | 11-12 January |
| COMMENCEMENT OF CLASSES | 5 September | 16 January |
| DEADLINE FOR COURSE SELECTION | 9 September | 20 January |
| DEADLINE FOR COURSE | 23 September | 3 February |
| DEADLINE FOR COURSE WITHDRAWAL | 21 September | 3 March |
| HOLIDAYS (EASTER) |  | 10-23 April |
| END OF CLASSES | 2 December | 28 April |
| FINAL EXAMINATIONS | 9-23 December* | 12-26 May* |
| PUBLIC HOLIDAYS | 1 October 28 October | 27 February (Green Monday) <br> 25 March <br> 1 April <br> 16 April (Easter) <br> 1 May <br> 5 June (Ascension Day) |

* In order to avoid any clash with other compulsory subjects, the students take first the Language Centre's examinations prior to the examination period.


## UCY Telephone, Fax and E-mail Directory

|  | TEL. | FAX | E-MAIL |
| :---: | :---: | :---: | :---: |
| Call Centre | 22894000 |  |  |
| UCY ADMINISTRATION |  |  |  |
| University Council Chairperson's Office | 22894350/4011 | 22894470 |  |
| Rector's Office | 22894008 | 22894469 | rector@ucy.ac.cy |
| Vice-Rector's Office (Academic Affairs) | 22894003 | 22894468 | vrectaa@ucy.ac.cy |
| Vice-Rector's Office (International Relations, Finance and Administration) | 22894005 | 22894467 | vrectorf@ucy.ac.cy |
| Directorate of Administration and Finance | 22894013 | 22894470 | daf@ucy.ac.cy |
| FACULTIES/DEPARTMENTS |  |  |  |
| ECONOMICS AND MANAGEMENT | 22894337 | 22895032 | fem@ucy.ac.cy |
| Accounting and Finance | 22893605/41 | 22895475 | afn@ucy.ac.cy |
| Economics | $22893700 / 2$ | $22895028$ | dept.econ@ucy.ac.cy |
| Business and Public Administration | 22893650/3740 | 22895030 | cbpa@ucy.ac.cy |
| ENGINEERING | 2892216 | 22895471 | fae@ucy.ac.cy |
| Architecture | 22892960/80 | 22895056 | arch@ucy.ac.cy |
| Civil and Environmental Engineering | 22892200/49 | 22895080 | cee@ucy.ac.cy |
| Electrical and Computer Engineering | 22892240/51/71 | 22895079 | ece@ucy.ac.cy |
| Mechanical and Manufacturing Engineering | 22892280/48/50 | 22895081 |  |
| GRADUATE SCHOOL | 22894044 | 22894438 | fgs@ucy.ac.cy |
| HUMANITIES | 22894423 | 22895046 | fhs@ucy.ac.cy |
| English Studies | 22892101/2 | 22895067 | english@ucy.ac.cy |
| French and European Studies | 22894389 | 22894387 | french@ucy.ac.cy |
| Turkish and Middle Eastern Studies | 22893950 | 22895040 | tus@ucy.ac.cy |
| LETTERS | 22892008 | 22895062 | faculty.letters@ucy.ac.cy |
| Byzantine and Modern Greek Studies | 22893870/4302 | 22894491 | bmg@ucy.ac.cy |
| Classics and Philosophy | 22893850 | 22894491 | classics@ucy.ac.cy |
| History and Archaeology | 22892180 | 22895068 | isa@ucy.ac.cy |
| MEDICAL SCHOOL | 22894352 | 22895396 | med@ucy.ac.cy |
| PURE AND APPLIED SCIENCES | 22892786 | 22892810 | fpas@ucy.ac.cy |
| Biological Sciences | 22892894 | 22895095 | biol@ucy.ac.cy |
| Chemistry | 22892780/2800 | 22895088 | chem@ucy.ac.cy |
| Computer Science | 22892700 | 22892701 | cs@cs.ucy.ac.cy |
| Mathematics and Statistics | 22892600 | 22895072 | commas@ucy.ac.cy |
| Physics | 22892820/6 | 22895083 | phy@ucy.ac.cy |
| SOCIAL SCIENCES AND EDUCATION | 22893420/1 | 22895045 |  |
| Education | 22892940/1/2 | 22894488 |  |
| Law | 22892920 | 22892910 | law.dept@ucy.ac.cy |
| Psychology | 22892070/86 | 22895075 |  |
| Social and Political Sciences | 22894560/1 | 22894559 |  |

## UCY Telephone, Fax and E-mail Directory

|  | TEL. | FAX | E-MAIL |
| :---: | :---: | :---: | :---: |
| RESEARCH UNITS/CENTRES/INSTITUTES |  |  |  |
| Archaeological Research Unit | 22893560 | 22895057 | archlgy@ucy.ac.cy |
| Aula Cervantes Nicosia | 22895136/7 | 22895014 | aula.nicosia@ucy.ac.cy |
| Centre for Applied Neuroscience | 22895190 | 22895076 | can@ucy.ac.cy |
| Centre for Banking and Financial Research | 22892496 | 22892421 | hermes@ucy.ac.cy |
| Centre of Excellence in Biobanking and Biomedical Research, biobank.cy | 22892815/82 | 22895371 | biobank@ucy.ac.cy |
| Centre for Medieval Arts \& Rituals (CeMAR) | 22893889 |  | cemar@ucy.ac.cy |
| Centre for Teaching and Learning | 22894546 | 22894548 | kedima@ucy.ac.cy |
| Centre for Gender Studies | 22892959 | 22894488 |  |
| Confucius Institute at UCY | 22894724/4461 | 22895297 | confuci3@ucy.ac.cy |
| Economics Research Centre | 22893660 | 22895027 | erc@ucy.ac.cy |
| Research Centre for Sustainable Energy - FOSS | 22894396/21 | 22895370 | foss@ucy.ac.cy |
| International Water Research Institute "NIREAS" | 22893527 | 22895365 |  |
| Language Centre | 22892901 | 22894439 | Icentre@ucy.ac.cy |
| Oceanography Centre | 22893989 | 22892575 |  |
| EMPHASIS Research Centre | 22893812 |  | info.emphasis@ucy.ac.cy |
| KIOS Research and Innovation Centre of Excellence | 22893450/1 | 22893455 | kios@ucy.ac.cy |
| The Cyprus Neuroscience Research Unit (CNRU) | 22894352 | 22895396 | neurology@uyc.ac.cy |
| Petrondas Institute of Modern Greek Studies | 22893825 |  | petrondas@ucy.ac.cy |
| School of Modern Greek | 22892028 | 22895066 | smgreek@ucy.ac.cy |
| University of Cyprus Centre for Field Research | 22895257/2077 | 22895374 | pakepe@ucy.ac.cy |
| UCY Student Welfare Fund | 22894052 | 22894463 |  |
| ADMINISTRATIVE SERVICES |  |  |  |
| Academic Affairs and Student Welfare Service | 22894021 | 22894463 | fm@ucy.ac.cy |
| Financial Services | 22894119 | 22894465 | fs@ucy.ac.cy |
| Human Resources Services | 22894177 | 22894480 | hr@ucy.ac.cy |
| Information Applications Service | 22892130 | 22894434 | ias@ucy.ac.cy |
| Information Infrastructure Service | 22895100 | 22895520 | itis@ucy.ac.cy |
| Internal Audit Service (GR) | 22894380 | 22894478 |  |
| International Relations Service | 22894288 | 22894472 | irs@ucy.ac.cy |
| Research and Innovation Support Service | 22894286/4313 | 22895506 |  |
| Technical Services | 22894200 | 22894464 | ts@ucy.ac.cy |
| Library | 22892020/2137 | 22895495 | lib@ucy.ac.cy |
| University Development Service | 22894348 | 22895016 | uds@ucy.ac.cy |
| OTHER ORGANIZED ENTITIES |  |  |  |
| Centre of Continuing Education, Assessment and Development | 22894151 | 22895060 |  |
| Centre of Enterpreneurship | 22895110 | 22895055 | encenter@ucy.ac.cy |
| Cultural Centre "Michalis Pieris" (Axiothea Mansion) | 22894531 | 22895053 | culture@ucy.ac.cy |
| Cyprus University Press | 22894314 |  | pek@ucy.ac.cy |
| European Office of Cyprus | 22894278 | 22895005 |  |
| "Lito Papachristophorou" Preschool and the University of Cyprus Nursery School | 22894136/4150 | 22895393 | nursery@ucy.ac.cy |
| Students Union Office | 22894026 | 22894485 | fepan@ucy.ac.cy |
| UCY Career Centre | 22894057/8 | 22894482 | careers@ucy.ac.cy |
| University of Cyprus Radio Station (UCY Voice) | 22895140 | 22895064 | ucyvoice@ucy.ac.cy |
| .CY Top Level Domain Registry | 22892127 | 22895077 |  |

## UCY Telephone, Fax and E-mail Directory

|  | TEL. | FAX | E-MAIL |
| :---: | :---: | :---: | :---: |
| OTHER SERVICES |  |  |  |
| Data Protection Officer | 22894361 | 22894469 | dpo@ucy.ac.cy |
| Diversity, Equality and Inclusivity Office | 22894451/4363 | 22894469 | diversity@ucy.ac.cy |
| Express Services Office | 22895555 | 22895480 | express@ucy.ac.cy |
| Health Centre (Kallipoleos) | 22895280 |  |  |
| Health Centre (UCY Campus) | 22895270 |  |  |
| Information Officer | 22894361 | 22894469 | info-ucy@ucy.ac.cy |
| Legal Counsellor of the University | 22894145 | 22894480 |  |
| Mental Health Centre | 22892136 |  | mentalhealth@ucy.ac.cy |
| Press and Media Relations Office | 22895304/5 | 22894477 |  |
| Security (Central Campus) | 22892011 |  |  |
| Security (New Campus) | 22894055 |  |  |
| Sports Centre | 22894182 | 22894190 | acenter@ucy.ac.cy |
| University Development and Alumni Relations Office | 22894356 | 22894477 | alumni@ucy.ac.cy |
| STORES/RESTAURANTS/COFFEE SHOPS |  |  |  |
| Bank of Cyprus | 22129832 |  |  |
| Canteen (University House "A.G. Leventis") | 22894425 |  |  |
| Parga Book Center/UCY Copy Center | 22022876 |  |  |
| Hairdresser | 22895133 |  |  |
| Hellenic Bank | 22501713 |  |  |
| Library Coffee Shop | 22893765 |  |  |
| Mini Market | 22895139 |  |  |
| Operations Dictorate Office (Spaces for rent) | 22894174 | 22895061 | opsdir@ucy.ac.cy |
| Restaurant (Kallipoleos) | 22892012 |  |  |
| Sports Centre Coffee Shop | 22894054 |  |  |
| Caffè Nero (SFC 02) | 22895131 |  |  |
| Coffee Shop (CTF 01-Common Teaching Facilities 01) | 22893763 |  |  |
| Coffee Shop (CTF 01-Common Teaching Facilities 02) | 22893762 |  |  |
| Coffee Shop Shacolas Educational Centre for Clinical Medicine | 22893764 |  |  |


[^0]:    * Students who wish to pursue the course combination LAW 201 and LAW 202 are encouraged to take the introductory course LAW 101 Introduction to legal Method and the Study of Law (6 ECTS) as an elective course.

[^1]:    - Regarding the restrictions relevant to the selection of courses, see Structure and Organization of the programme of study.
    - It is recommended that students select one seminar per semester.

[^2]:    Note:

    - Students must take three Free Elective Courses. These must be from at least two faculties of the University and are selected in consultation with the academic advisor.
    - Students must take a total of five Restricted Elective Courses during the third and fourth years of studies.

[^3]:    * Degree Thesis:

    Thesis is optional and is completed during the fourth year of studies. A general average grade of 7.0 is required for allowing students to choose the thesis option. Instead of writing a thesis, a student can take two courses from Specialization Courses.

    ## ** Placements in Organizations:

    This is an elective course carried out during the summer semester of the third year of studies. In order to enroll, a grade point average of 7.5 or above and written consent from the academic coordinator of "Placements in Organizations" are required. The course is credited with 12 ECTS. In case students do not enroll to the course, they must either choose two other courses from the Specialization Courses list or Dissertation.

