

MSc in Environmental Health

PROSPECTUS

Academic Year 2016-17

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WELCOME

It is with great pride that we anticipate the academic year 2016-17. For 2016-17 the Institute will offer again two MSc programs – the MSc in Epidemiology and Biostatistics and the MSc in Environmental Health – as well as our Ph.D. in Environmental and Public Health. These programs, which are taught by distinguished faculty from the Cyprus University of Technology and other universities in the region, reflect our efforts to offer world class education in public health at our Institute.

We hope that this document will serve as a source of useful information for those of you considering applying to graduate school and for those of you who will eventually enrol in one of Cll's Master's or Doctoral Programs.

Maria Kambanaros, Ph.D. Dean, School of Health Sciences Associate Professor, Cyprus University of Technology

1. INTRODUCTION

The Cyprus International Institute

The Cyprus International Institute for Environmental and Public Health ("CII" or "the Institute") is an international research, education, and technology initiative for environmental and public health. It was established, by the Government of Cyprus and Harvard University in 2004, to address environmental and public health issues in Cyprus and throughout a broad region, including the eastern Mediterranean, northern Africa, and the Middle East.

CII provides opportunities for research, education, and training in environmental, occupational, and public health to students, scholars, and professionals. The primary focus of the Institute's research is on improving understanding of the relationship between exposure to environmental contaminants and human disease. A secondary emphasis is on improving the ways that such information is used in risk and decision analysis to inform public policy. This multidisciplinary research program attracts funding and recognition from Cyprus, the European Union, the USA, and other countries. The Institute is also active in continuing professional education and community outreach. Since 2005, it has offered a series of public lectures, continuing professional education workshops, symposiums, and other events in Cyprus.

From 2004 to 2009 the CII operated as an independent Institute in Nicosia. In August of 2009 the Institute moved to Limassol, where it now operates as an element of the Cyprus University of Technology, under its Faculty of Health Sciences.

The Cyprus University of Technology

Cyprus University of Technology was established by law in 2003 and admitted its first students in September 2007. It is a relatively new, public University based in the city centre of Limassol. The University includes six Faculties, twelve academic Departments, one Institute, and a language center. The Cyprus International Institute for Environmental and Public Health operates as an element of the Faculty of Health Sciences.

Limassol is the second-largest city in Cyprus and one of the most important tourism, trade, and service-providing centers in the Mediterranean. It is also renowned for its long cultural tradition and therefore attracts a wide range of tourists, mostly during an extended summer season.

The Cyprus University of Technology aspires to develop into a modern, pioneering university, able to offer education and high level research in leading branches of science and technology which have high impact on the economic, technical, and scientific sectors.

With its orientation towards applied research, CUT aspires to establish for itself a role in support of the state and society in their efforts to confront problems which cover all areas of science, technology, and public health.

Academic Programs for 2016-17

For 2016-17, CII will offer two master's degree programs (the MSc in Environmental Health and the MSc in Epidemiology and Biostatistics) and the PhD in Environmental and Public Health. This prospectus describes the MSc in Environmental Health. Documents can be found on the Institute's website (www.cut.ac.cy/cii) describing the other programs. This sixteen-month MSc involves eleven months of coursework in residence and a practicum which can be completed in absentia.

Our students come from Cyprus, the eastern Mediterranean, northern Africa, the Middle East, and from many other countries throughout the world – e.g., Lebanon, Egypt, Israel, Iran, Turkey, Ethiopia, Nigeria, Liberia, Ghana, Tanzania, France, England, Germany, Italy, India and Bangladesh – and from the US and other countries in North and South America. They come with quite varied academic backgrounds – physicians, chemists, engineers, public health specialists, economists.

After earning their MSc degree, many return to their countries to serve in government ministries and agencies; others take positions as specialists in environmental or public health in consultancies or industry. About one-third of our graduates pursue careers in academia and go on to doctoral research programs or other advanced training at the best universities in the world, such as Harvard, Oxford, Yale, and King's College.

Academic Year 2016-17

Fall Semester 2016 (5 September to 16 December) Spring Semester 2017 (9 January to 28 April) Summer Session 2017 (2 May to 23 June) Fall Semester 2017 (4 September to 15 December)

Program Overview - Environmental Health

Environmental Health is a fascinating, interdisciplinary field which seeks to understand the effects of human exposure to contaminants in the community, home, and workplace and to use this knowledge to improve public health.

Environmental health specialists need to understand the sources of pollution; the physical and chemical processes which govern their fate and transport; the biological processes which dictate their intake, uptake, metabolism, elimination, and toxicity; and the approaches for sampling, analysis, measurement, and modelling of ambient concentrations, human exposures, and biologically-relevant doses. These professionals must also be familiar with the principles of biostatistics, epidemiology, toxicology, and risk assessment in order to quantify risks and to characterize the state of knowledge and uncertainty underlying these estimates. Finally, they must understand the central concepts of economics, decision analysis, and administrative law in order to value health impacts, to assess the consequences of various strategies for reducing human exposures, and to design effective policies and regulations.

The MSc in Environmental Health relies upon an integrated, interdisciplinary curriculum taught by distinguished faculty from Cyprus University of Technology and other leading schools of public health / environmental science. It involves coursework in the biological sciences, in

exposure assessment and environmental sciences, in the quantitative sciences, and in policy, law, and regulation.

The MSc experience at CII culminates in a practicum, in which each student integrates and applies knowledge from the above courses to analyse a problem in environmental decision making or regulation. The practicum not only provides experience in quantitative analysis, but also gives our graduates experience in writing scientific manuscripts and in preparing and presenting scientific talks.

Students may pursue the MSc in Environmental Health as their terminal degree and pursue a career in either academia or industry, or they may use this program as preparation for further studies towards a doctoral degree. The class size is small (fifteen to twenty students), and the program is highly selective. The small class size facilitates individualized teaching and mentoring of students.

Applicants to the program should hold a bachelor's degree or its international equivalent, including preparation in biology, chemistry and calculus. Successful applicants have come from a variety of fields, including medicine/biology, engineering/physical sciences, public health/environmental sciences, and many others.

Program Structure

The curriculum of the MSc in Environmental Health is presented below, organized by discipline:

QUANTITIVE SCIENCES			
CII_500	BIOSTATISTICS (5.0 credits / 8 ECTS)		
CII_504	EPIDEMIOLOGY (3.75 credits / 6 ECTS)		
CII_507	RISK ASSESSMENT (2.5 credits / 4 ECTS)		
CII_512	ENVIRONMENTAL EPIDEMIOLOGY (2.5 credits / 4 ECTS)		
CII_602	ADVANCED EPIDEMIOLOGICAL METHODS I (2.5 credits / 4 ECTS)		
CII_606	REGRESSION ANALYSIS (2.5 credits / 4 ECTS)		
CII_608	INTRODUCTION TO SAS FOR PUBLIC HEALTH (2.5 credits/ 4 ECTS)		
BIOLOGICAL S			
CII_501	BIOLOGICAL BASIS for PUBLIC HEALTH (5.0 credits / 8 ECTS)		
CII_511	OCCUPATIONAL HEALTH (2.5 credits / 4 ECTS)		
EXPOSURE AS			
CII_506	WATER POLLUTION (3.75 credits / 6 ECTS)		
CII_508	AIR POLLUTION (3.75 credits / 6 ECTS)		
CII_510	EXPOSURE ASSESSMENT (2.5 credits / 4 ECTS)		
APPLICATIONS			
CII_514	INTRODUCTION TO ENVIRONMENT & PUBLIC HEALTH (1.25 / 2 ECTS)		
CII_503	EUROPEAN & INTERNATIONAL ENV LAW & POLICY (2.5 credits / 4 ECTS)		
CII_580	PRACTICUM in EH (20.0 credits / 32 ECTS)		

PhD in Environment and Public Health

CII also offers a program of advanced coursework and research training leading to the Doctor of Philosophy (PhD) in Environmental and Public Health. This program is intended for students who wish to pursue careers as researchers or in academia.

Students interested in applying to the program must have exceptional academic records and must submit scores from the Graduate Records Examination at the time of their application. Applicants are strongly encouraged to contact the CII Academic Director, Dr. Christophi, and/or the member or members of our faculty with whom they seek to study, well before the application deadline.

Complete information about the PhD program, including application forms and instructions, is available on our website (www.cut.ac.cy/cii). Admission to the program is competitive and highly selective.

Contacting the Institute

Prospective students who have questions about admission requirements, or who require assistance with the application process, are welcome to visit the Institute or may contact Dr. Costas Christophi, the Academic Coordinator of CII.

Online application information and forms are available on the Graduate and Postgraduate Education page of the Institute's web site at http://www.cut.ac.cy/cii.

Main Contact at the Institute

NAME	TITLE	E-MAIL ADDRESS	TELEPHONE
Costas Christophi	Assistant Professor & Coordinator of Academic Programs, CII	costas.christophi@cut.ac.cy	+357-25-00 2393

2. APPLYING FOR ADMISSION

Applications will be accepted beginning February 8, 2016. The application deadline is April 8, 2016.

Details about the application process and instructions on how to apply electronically are available at the Institute's website: http://www.cut.ac.cy/cii. The application form is self-explanatory and asks for: (i) information about educational background; (ii) information about work experience; (iii) a statement of interest; (iv) the names, positions, and contact information of at least two individuals who can provide letters of reference; and (v) evidence of English proficiency (IELTS score of 6.5 or more; TOEFL of 82 or better).

It is the applicant's responsibility to contact the referees and ask them to submit their reference letters. Each referee should be provided with the form or link available at our website http://www.cut.ac.cy/cii for the electronic submission of the letter.

The application will be <u>considered complete</u> only when the complete set of materials described above is received by the Cyprus University of Technology.

Review Process

All complete applications are evaluated by the Committee for Admissions and Degrees (CAD) at the Institute. The committee reviews and ranks the applicants. Factors considered in the evaluation and ranking of applicants include: strength of undergraduate grades (especially in science and mathematics); nature, duration and relevance of work experience; strength and consistency of letters of reference; coherence, relevance, and sense of purpose reflected in the applicant's statement; and, where appropriate, ability to read, write, speak, and understand English. Final admissions decisions are made by the Cyprus University of Technology and communicated to applicants by the Director of CII or the Director of Service for Academic Affairs and Student Welfare.

Scholarships

Financial support is offered to a few of the most highly qualified candidates to cover the tuition costs (€4,800 for EU citizens and €8,000 for Non-EU citizens). These are awarded primarily on the basis of academic merit, with some consideration of financial need. Students for whom English is a second language and have graduate from programs where English was not the language of instruction will be considered for scholarship support only after CII receives evidence of acceptable TOEFL or IELTS scores.

3. PROGRAM REGISTRATION

Tuition Fees

The tuition for the Master's Program is €4,800 for citizens of the European Union and €8,000 for all other students.

Tuition Deposit

All applicants who are offered admission are required to submit a tuition deposit of €625 at the time that they confirm their intent to enrol at CII. Students must submit their tuition deposits no later than 31 May 2016. Submission of the tuition deposit ensures their place in the class of 2016-17 and is credited toward their tuition and fees when they register for the master's program in September.

This deposit is waived for students who are recipients of need-based scholarships.

Applicants who confirm their intent to enrol, but subsequently request deferral of their admission, may request that the deposit be credited to their account for the following academic year.

Applicants who confirm their intent to enrol, but who fail to do so, forfeit their deposit.

Registration Procedures

Every student must register *in person* during orientation, which for 2016-17 will be held on Friday, 2 September 2016.

To complete the course registration process the following procedures must be followed:

- 1. Complete and sign a *Registration Form.*
- 2. Pay in full the balance of tuition fees to the Accounts Office and obtain a *Financial Clearance Receipt*.
- 3. Submit the completed, signed Registration Form and the Financial Clearance Receipt to the Postgraduate Studies Office and obtain a *Certificate of Registration Form Submission*.

Students failing to register by 5 September 2016 will be charged a €75 Late Registration Fee.

Tuition Refunds

Students who enroll, register, and subsequently withdraw from the program before the end of the 4th week of classes in the first semester (30 September 2016) will receive a tuition refund. The tuition deposit of 625 Euro will not be refunded.

All payments to CII/CUT should be made to the following bank account:

Bank Name : Bank of Cyprus Public Company Ltd

Acct Name : Cyprus University of Technology

Account No. : 0335-05-046698-00

IBAN No. : CY14 0020 0335 0000 0005 0466 9800

Swift Code : BCYPCY2N

Reference Field: Applicant's Name (LAST NAME, FIRST NAME)

4. DEGREE REQUIREMENTS

The MSc program includes a practicum, designed to allow students to apply and integrate what they have learned in their coursework.

The distribution of course credits by academic term is summarized below. The detailed course requirements of, and schedules for the program are presented in a table format on page 9.

Semester	MS in EH
Fall Semester 2016	32 ECTS (20 credits)
Spring Semester 2017	32 ECTS (20 credits)
Summer Session 2017	20 ECTS (12.5 credits)
Fall Semester 2017	16 ECTS (10 credits)
TOTAL	100 ECTS (62.5 credits)

The language of instruction at CII is English. All courses are taught in English and all assignments must be completed in English.

To earn the MS degree and receive his or her diploma, a student must:

- Successfully complete all courses and the practicum i.e., 100 ECTS (62.5 credits)
- Maintain good academic standing i.e., a cumulative GPA of B- (6.0 on the EU system or 2.7 on the US system)
- Pay all tuition and fees and obtain a financial clearance certificate indicating this.

Course Credit System

Credits are assigned using a dual system:

- Each course credit corresponds to 12 hours of in-class activities. Each contact hour refers to 60 minutes devoted to in-class activities. In-class examinations count as class contact-hours. Thus, a 5-credit course involves at 60 contact-hours and a 2.5-credit course involves 30 contact-hours.
- In the EU system one ECTS corresponds to 30 hours of total effort, both in and outside of the classroom. Typically the Institute assumes that students spend 3 hours working outside of the classroom for each hour of in-class contact time. On this basis, a course which assigned 2.5 US credits should involve 30 hours of in-class time and 90 hours of time spent working outside of the classroom. The total effort of 120 hours should then correspond to 4 ECTS.

Course Requirements for the Master's of Science in Environmental Health			
Fall Semester 2016 5 September -16 December 32 ECTS (20 credits)	Spring Semester 2017 9 January - 28 April 32 ECTS (20 credits)	Summer Session 2017 2 May - 23 June 20 ECTS (12.5 credits)	Fall Semester 2017 4 September - 15 December 16 ECTS (10 credits)
Environment & Public Health – CII_514* 2 ECTS (1.25 credits)	Water Pollution – CII_506* 6 ECTS (3.75 credits)	European & International Environmental Law & Policy – CII_503 4 ECTS (2.5 credits)	
Biostatistics – CII_500* 8 ECTS (5.0 credits)	Air Pollution – CII_508* 6 ECTS (3.75 credits)	Occupational Health – CII_511* 4 ECTS (2.5 credits)	
Biological Basis for Pub Health – CII_501 8 ECTS (5.0 credits)	Regression Analysis- CII_606* 4 ECTS (2.5 credits)	Exposure Assessment – CII_510* 4 ECTS (2.5 credits)	
Epidemiology – CII_504* 6 ECTS (3.75 credits)	Environmental Epidemiology – CII_512 4 ECTS (2.5 credits)		
Risk Assessment – CII_507* 4 ECTS (2.5 credits)	Adv Epidemiologic Methods I – CII_612 4 ECTS (2.5 credits)		
SAS for Public Health – CII_608 4 ECTS (2.5 credits)			
	EH PRACTICUM - CII_ 580 8 ECTS (5 credits)	EH PRACTICUM - CII_580 8 ECTS (5 credits)	EH PRACTICUM - CII_580 16 ECTS (10 credits)
 Note that courses marked with one * are 	e taken in the first year of the two-year half-time	program. All other courses are taken in the secon	nd year.

Course Attendance Policy

Graduate students at CII are expected to attend all lectures, computer workshops, and other activities (e.g., seminars, special lectures) offered as part of the program.

We expect students to fully participate in all courses and, as a matter of professional courtesy, to inform professors if they expect to miss a class meeting. If health issues, or other unexpected events, require a period of prolonged absence this should be discussed with the faculty advisor.

Course Grading System and Academic Standing

The program maintains a dual grading system.

Primary grades are assigned using a letter grade system. In this system – (i) grades range from A to F; (ii) any grade of C (5 on the EU system) or above is considered a passing grade; but, (iii) in order to be considered in good academic standing, or to graduate from the program, a student must maintain a grade point average of B- (6 on the EU system / 2.7 on the US system) or above.

Students who fail to maintain good academic standing may jeopardize their continued participation in the MS program, and will lose their scholarship support.

The table below shows the correspondence between the primary letter grades and the EU and USA numerical values.

Letter	Numeric	al Value
Grade	EU	USA
Α	10	4.0
A -	9	3.7
B +	8	3.3
В	7	3.0
B -	6	2.7
С	5	2.0
F	0	0

CII degree candidates are required to take all courses for an ordinal (letter) grade. CUT students from other departments may enroll in courses at the Institute on a pass/fail basis if this is allowed by the rules of their home department or degree program.

Withdrawal (W); Incomplete (I); and Failure (F)

Grade of Withdrawal: W

Students who petition for, and obtain, approval to withdraw from a course at the Institute will receive a grade of "W". The withdrawal will be a part of their permanent academic record.

Grade of Incomplete: I

The grade of "incomplete" is normally assigned when a student has been unable to complete all of the work assigned in class. The incomplete appears on the student's transcript until all coursework is completed, at which point a letter grade is assigned and the transcript is updated to show the final letter grade.

Instructors may grant an extension to students who fail to submit an assignment on time. Typically the penalty for missing a deadline is a lowering of the student's grade by one letter (e.g., from A- to B-). Individual course leaders may set more lenient or strict penalties, but they must do so in a written policy provided to students at the beginning of the course.

If a faculty course director notices that a student has missed several deadlines, he/she may recommend that the student take an "incomplete." If the student elects this option, he/she must work with the course director to negotiate a written agreement specifying the work to be performed, the deadline for completion of the work (normally no more than a few weeks after the course ends, and in no case more than one term later), and the penalty (such as 1/2 grade or, full grade) for late completion of the work. This agreement, signed by both the student and the course director, must be submitted to the CAD by the instructor. Forms that are hand delivered by the student will not be accepted.

If the completed work is submitted by the deadline, the instructor (or surrogate) will evaluate it, and the grade given will replace the incomplete ("I") on the student's record. If the incomplete work is not made up by the deadline date, a grade of "F" will be given for the work not completed. If this work accounts for the whole grade, the final grade given will be an "F."

Grade of Failure: F

Students failing any course at the Institute will receive a grade of "F." The failure will be part of their permanent academic record.

Since the grading option for the failed course is ordinal, "0" will be calculated into the cumulative grade point average. Students who fail a course have one opportunity to repeat the course for a new grade during the subsequent academic year. A new grade will be given for the repeated course, however, the "F" previously received will remain on the student's record. A student who fails a required course twice will not be awarded the degree for which he/she is candidate.

Failure of Examinations

Students who fail an examination may not retake the exam without permission from the Academic Program Coordinator of the Institute and the instructor of the course. Failing an exam in a course in which that exam is the only means of evaluation results in failure of the course.

Grade Changes

Final authority for the designation of grades rests with the grading instructor of each course. *Only instructors may initiate a change in the grade*. Once a grade has been submitted to the Postgraduate Studies Officer, the following procedures must be followed in order to make any changes:

- To change an "Incomplete" to an "I/ordinal" grade: The grading instructor must complete the final portion of the *Incomplete Agreement* for the student and deliver the form directly to Postgraduate Studies Officer.
- To correct a clerical error in reporting the original grade: The grading instructor must submit a *Change of Grade Form* to the Academic Program Coordinator for review and decision.
- To change a grade in light of new and relevant information regarding the student's performance the grading instructor must submit a *Change of Grade Form* to the Academic Program Coordinator for review and decision.

For grade changes other than those made to resolve an incomplete, the grading instructor is expected to indicate that he/she has reviewed the work of **all** other students in the course in order to determine that no similar errors have been made and gone uncorrected.

Change of Grade Forms will not be accepted from a student; the instructor must submit the completed form. Please note that grades cannot be changed after a degree has been voted, nor will a grade change be considered more than one semester following the initial due date of the grade.

5. INTERNATIONAL STUDENTS

Students from countries other than Cyprus must have either *residence cards or student visas* and must have *evidence of medical insurance* and *evidence of financial ability* to support their education. The specific requirements differ substantially depending upon whether the student is a citizen of the EU (or EEA countries) or is a citizen from a country outside of the EU.

Entry Visa to Cyprus

All students who receive a letter of acceptance from the University should contact the International Student Office to inquire about visa requirements. The procedures for both EU and non-EU students are explained below:

Citizens of the EU (or EEA countries)

Residence Permit for Cyprus

Citizens of EU or EEA countries (Iceland, Norway, and Lichtenstein) do not need an entry Visa. However, they must apply for a residence permit within 4 months of entry into Cyprus. Application forms are available from the International Student Office. The Residence Permit issued to a student is valid only during the period of their educational studies. To obtain a residence permit, each student must submit:

- a certified copy of their *European Health Insurance Card* (or other proof of health insurance);
- a copy of their letter of acceptance;
- a valid identification card (e.g., passport); and
- a certificate of financial support.

Health Insurance

EU citizens must bring their European Health Insurance Card. This document is an evidence of health insurance and will guarantee their medical treatment on the same conditions as Cypriot citizens. Students should contact their regional social insurance office for European Health Insurance Card or other document that proves their insurance.

Students from Non-EU Countries

Prior to their arrival in Cyprus, students from non-EU countries must submit the documents listed below to the Cyprus Embassy or Consulate in their country of residence for obtaining a student visa for Cyprus.

 An original / attested police clearance certificate. This must have been issued no more than six (6) months before the date that fall term classes are scheduled to begin.

- An original letter from a bank confirming that the student, or his/her parents, have sufficient funds to finance his/her studies and living expenses in Cyprus.
- Original and attested copy of academic qualifications and transcripts.
- The acceptance letter from CII/CUT.
- Valid passport. (The passport must be valid for at least one year from the date that classes are scheduled to begin.)
- Original Medical Examination Certificates for HIV/AIDS Virus, Syphilis, Hepatitis B, Hepatitis C, Tuberculosis (Chest X-Rays). The health certificates should be valid for no more than three (3) months. The Medical Examination Certificates must have been attested by the Ministry of Health and Ministry of Foreign Affairs of the student's country of origin and then by the Cyprus Embassy/Consulate.
- A tuition payment receipt from CII/CUT indicating that tuition fees have been paid in full.

If there is not an embassy or consulate in the student's country of origin, CUT will apply on behalf of the student to the Migration Office in Cyprus. In this case, all of the documents listed above must be sent to the International Student Office and received by this office no later than 20th June.

Student Visas issued by the Migration Authorities are good for a period of one year. If the program lasts more than one year, the visa must be renewed each year.

Student Visa Process - Arriving in Cyprus

Students who successfully obtain a Visa (from the Cyprus Embassy or Consulate in their country of residence) must bring all of the documents listed above to Cyprus. Each required document must bear the official stamp of the Embassy or Consulate. At the point of entry (i.e., the airport or port) each foreign student must present evidence that all tuition fees have been paid. This must be a receipt of remittance (either via a bank cheque, international money transfer, or bank draft) indicating full payment of tuition fees. In addition, each student must present (in cash, travellers' cheques, or banker's draft) the amount they are expected that they will need for their living expenses for the first 3 months in Cyprus (Euros 1300).

Health Insurance

Students from outside of the EU are required to carry medical insurance covering them for the duration of their studies. The insurance must cover accidents, sicknesses, medical care, and hospital treatment. The annual cost of such medical insurance is approximately 150 Euros.

Please note that most health insurance schemes do not cover expenses for eye doctors or dentists. In view of this, it is advisable to have an eye test and dental examination before coming to Cyprus.

If a student has an international health plan that covers his/her stay in Cyprus he/she will need to bring all necessary documentation with him/her as it will have to be submitted to the immigration office when he/she will apply for a temporary residence visa.

Finally, it is advisable to all students to take out a travel insurance policy to cover the journey to Cyprus and for about a week after arrival. This should cover any loss or damage of personal property as well as any medical costs.

Housing

The university rents a number of apartments/rooms. These are offered to students at a reduced rental price. International students have priority for university housing. Upon acceptance to the university, international students who are interested in staying on Campus must submit a Housing Application Form.

For further information contact:

International Students' Office
Corner of Athinon and Nikolaou Xiouta Streets
3041 Limassol
Cyprus

Tel. +357-25002399, Fax. +357-25002687 international.office@cut.ac.cy www.cut.ac.cy/studies/international/SKYPE: internationalstudentofficecut

6. ACADEMIC CALENDAR

The academic year is divided into the Fall Semester, the Spring Semester, and the Summer Session. Important dates for the academic year are presented below:

Religious Holidays

Any student who is unable, because of his or her religious beliefs, to attend classes or to participate in any examination, study, or class assignment on a particular day shall be excused from any such examination or requirement which he or she may have missed because of such absence, provided that notification is given to his or her instructor(s) in advance. No adverse or prejudicial effect shall result to any student for availing himself or herself of these provisions.

ACADEMIC CALENDAR 2016-17			
1st YEAR			
Fall Semester 2016			
September 5 – Monday	Fall Session Classes Begin		
October 28 – Friday	Public Holiday – "Greek National Day"		
December 16 – Friday	Fall Semester Ends		
December 19 (Monday) - January 8 (Sunday)	Christmas & New Year's Holidays		
Spring Semester 2017			
January 9 – Monday	Spring Session Classes Begin		
February 27 – Monday	Public Holiday – "Green Monday"		
April 10 (Monday) – April 18 (Tuesday)	Public Holidays – "Greek Orthodox Easter Week"		
April 28 – Friday	Spring Semester Ends		
Summer Session 2017			
May 1 – Monday	Public Holiday - Labour Day/May Day		
May 2 – Tuesday	Summer Session Classes Begin		
June 5 – Monday	Public Holiday – "Orthodox Pentecost Monday"		
June 23 – Tuesday	Summer Session Ends		
2 nd YEAR			
Fall Semester 2017			
September 4 – Monday	Fall Semester Begins		
December 15 – Friday	Fall Semester Ends		

7. COURSE CATALOGUE

CII_500 - BIOSTATISTICS

Costas Christophi Fall Semester 8 ECTS (5.0 credits)

The objectives of this course are to introduce the basic biostatistical techniques which are essential for analyzing data arising in environmental and public health and to introduce and illustrate practical applications of regression analysis, with a concentration on linear regression and logistic regression. Statistical reasoning will be emphasized through problem solving and applications. It is recommended that students have previously taken algebra and calculus; however, no prior knowledge of statistics is assumed. At the end of the course the student should: a) gain an understanding of the basic descriptive and inferential techniques used in statistics, b) be aware of potential errors and limitations when reading journal articles, c) develop judgment about which statistical technique to use in a given situation, d) learn how to utilize statistics to interpret data and to make decisions, e) be able to carry out a multiple linear and logistic regression analysis, f) understand the concepts and methods of model selection, goodness-of-fit, and testing, and g) have strengthened his her background for future work in biostatistics.

CII_501 - BIOLOGICAL BASIS FOR PUBLIC HEALTH

Stefania Papatheodorou Fall Semester 8 ECTS (5.0 credits)

The objective of this course is to present aspects of human physiology in a manner geared toward non-medical students. The specific learning objective for each lecture will be available to students before each class. The first part of the course starts with a study of the basic cell-functions including a review of cell structure, chemical composition of the body, protein activity and cellular metabolism, genetic information and protein synthesis and movements of molecules across cell membranes. The second and largest part of the course begins with biological control systems and a review of homeostatic mechanisms and cellular communication. Emphasis is then placed on understanding the various systems of the body including the respiratory system, cardiovascular system, endocrine system, nervous system and neural control mechanisms, gastrointestinal system and reproductive system, defence mechanisms, regulation of metabolism and energy balance will also be examined. The third and last part of the course includes the types and mechanisms of genetic susceptibility to disease and an introduction to population genetics and evolution.

CII_503 - EUROPEAN AND INTERNATIONAL ENVIRONMENTAL LAW AND POLICY

Nicholas Ashford Summer Session 4 ECTS (2.5 credits)

National governments in both developed and industrializing countries have evolving legal systems in the regulation of environmental hazards in air, water, waste, the workplace, consumer products, and food. Some are more effective than others. In the 1970s the US was the leading model for these systems, but the European Community has now surpassed the US in its development of initiatives and legal instruments. At the same time,

there is increasing international recognition of the need to harmonize environmental legal approaches and to coordinate national efforts, especially with the advent of globalized trade. This course will examine the basic features of regulatory systems for controlling and preventing pollution and contamination in air, water, waste, the workplace, consumer products, and food. The focus will be on European and International Environmental Law. Both mandated standards and economic incentives will be explored, and different national systems will be compared. This course draws upon European, U.S. and international literature published in English. It is intended to stimulate discussion and critical thinking of the assigned reading materials, as well as provide familiarity with legal concepts and skills.

CII_504 - EPIDEMIOLOGY

Andrie Panayiotou Fall Semester 6 ECTS (3.75 credits)

The course will be divided in two parts, with part I providing an introduction to basic principles and concepts of epidemiology such as measures of disease incidence (e.g. risk, rate, odds) and measures of effect (e.g. relative and absolute risk) as well as demonstrate understanding of the basic principles underlying different study designs, including cohort, case-control and intervention studies. Part II, will cover topics relating to the design, analysis and interpretation of epidemiological studies and will examine these topics in greater detail, discussing the strengths, limitations and interpretation of the alternate approaches. The course will consist of lectures on the basic principles and methods of epidemiology followed by relevant in-class practical seminars or in the case of the study designs, followed in some cases by a presentation of an actual study using that methodology, as well as the critique of a relevant article published in the medical literature. Course objectives will be achieved through active learning and a combination of lectures and seminars devoted to exercises, or the review and discussion of journal articles highlighting various aspects of the design or interpretation of studies. Students will work in small group sessions with active participation in discussions of reading assignments and study questions.

CII_506 - WATER POLLUTION

Konstantinos Makris Spring Semester 6 ECTS (3.75 credits)

This course is designed to teach basic and applied principles of water pollution issues related to human health on nano, micro, local, regional and global scales. This graduate-level course will also examine the relationship between orally-ingested contaminants and specific adverse health effects, either carcinogenic or non-carcinogenic. The course will begin with a discussion of the basic chemical, physical and biological properties of water and water contaminants, including hydrologic considerations. Subsequent lectures will cover specific chemical and biological contaminants in potable, ground, surface, brackish, and marine waters; sources, fate, transport, and transformation of contaminants; monitoring techniques; cases around the globe on the specific health effects arising from the deteriorated drinking water quality; drinking-water and wastewater treatment; transmission of waterborne diseases; toxicological concerns of chemicals in water, including endocrine disrupters, pharmaceuticals, and disinfection by-products; wetland ecology; and water contaminant mitigation/remediation approaches, including interactions with the air and soil systems.

CII_507 - RISK ASSESSMENT

TBD Fall Semester 4 ECTS (2.5 credits)

This course provides an introduction to risk assessment. It describes the major elements of risk assessment – i.e., hazard identification, exposure assessment, dose-response analysis, and risk characterization – and considers the nature, strengths and weaknesses of the scientific evidence underlying current estimates of human health risks from exposure to pollutants in the environment. Topics covered include – the normal, lognormal and binomial; the central limit theorem; the one-hit and multistage models of cancer; tolerance distributions; the NOAEL, BMD, UFs and RfD; direct and indirect methods of exposure assessment; interspecies scaling – allometry and PBPK models; the Gaussian air pollution model; compartmental models; uncertainty and variability, parameter uncertainty and model uncertainty; expert judgment, decision analysis & value of information. Case studies are used to illustrate various issues in risk assessment and decision making.

CII_508 - AIR POLLUTION

Konstantinos Makris Spring Semester 6 ECTS (3.75 credits)

The objective of part of this course is to develop an understanding of natural and anthropogenic energy systems. Sources of air pollution technology of emission control and an examination of regulatory institutions will be presented. Another portion of the course focuses on atmospheric processes with an emphasis on modelling techniques that relate air quality to emissions. Some lectures cover current research results. The course also provides an introduction to indoor air quality (IAQ) assessment and control. It begins with a description of the indoor contaminants of greatest significance, their sources, and health effects. Subsequent lectures deal with how buildings operate including an introduction to heating, ventilating, and air-conditioning systems and contaminate transport mechanisms. Other topics that are presented include prevention and mitigation of IAQ problems, IAQ and comfort guidelines, moisture problems, and IAQ modelling.

CII_510 - EXPOSURE ASSESSMENT

Konstantinos Makris Summer Session 4 ECTS (2.5 credits)

This course is designed to provide the conceptual foundation and tools necessary to assess human exposure to environmental contaminants. It considers the factors which relate source emissions to ambient concentrations; the pathways of exposure and human behaviour which govern human contact with, and intake/uptake of pollutants; and the biological processes which convert intake/uptake to absorbed dose, delivered dose and biologically-effective dose. The goal of the course is to provide a complete conceptual framework for understanding the principle approaches for estimating human exposure to environmental contaminants in support of regulation policy and epidemiology. Strategies for measurement and for modelling are described and compared. Statistical aspects of study design and data evaluation are addressed.

CII_511 - OCCUPATIONAL HEALTH

Elpidoforos Soteriades Summer Session 4 ECTS (2.5 credits)

This course includes an overview of occupational health and safety including the effects of specific workplace chemical, biological and physical hazards such as asbestos, silica, metals, organic compounds, microbial exposures, noise and vibration. It also considers the relationship between working conditions and health, with special emphasis on the recognition, measurement, and control of occupational hazards. The course focuses on the assessment of workplace hazards, the physiology and biomechanical aspects of work, and a practical problem-solving approach to health problems in various work settings.

CII_512 - ENVIRONMENTAL EPIDEMIOLOGY

TBD Spring Semester 4 ECTS (2.5 credits)

This course examines application of epidemiologic methods to environmental and occupational health problems. Objectives are to review methods used in evaluating the health effects of physical and chemical agents in the environment, to review available evidence on the health effects of such exposures, and to consider policy questions raised by the scientific evidence. Topics include lectures on methodology, seminars on the review and criticism of current literature, and presentations by outside experts on specific environmental and occupational health issues of current interest.

CII_514 - INTRODUCTION TO ENVIRONMENT AND PUBLIC HEALTH

Stefania Papatheodorou Fall Semester 2 ECTS (1.25 credits)

The course introduces students to the field of public health, with an emphasis on current understanding of the determinants of disease; the methods used to understand questions in public health; the approaches used to improve public health; and the analytic framework for assessing the cost and efficacy of proposed interventions. We begin with an analysis of the most recent results from the World Health Organization's Global Burden of Disease 2010. We ask how public health are gauged and then learn what is now known about the role of environment, occupation, diet and exercise, smoking and other factors as determinants of disease regionally and globally. We ask how these estimates have been derived and, in so doing, learn about the nature and importance of epidemiology and biostatistics. We consider how results from studies are combined and extrapolated. Finally, we learn about major successes in public health and also about current challenges in public health. Methods of gauging the efficacy and cost of interventions are considered. Social and behavioural factors which impact the success of public health programs are discussed.

CII_602 - ADVANCED EPIDEMIOLOGIC METHODS: PART I

Stefania Papatheodorou Spring Semester

4 ECTS (2.5 credits)

The course will examine at a greater detail the types of study designs used in epidemiology, starting with descriptive and followed with analytical study designs. Beginning with the randomized clinical trial as a paradigm, it will examine common problems in the design, analysis, and interpretation of observational studies. Problems of exposure and disease definitions, time-dependent effects, confounding, and misclassification are considered in the light of data sources typically available. Relevant statistical methods are introduced but not developed in detail. Course objectives will be achieved through active learning and a combination of lectures and seminars devoted to exercises, or the review and discussion of journal articles highlighting various aspects of the design or interpretation of studies. Students will work in small group sessions with active participation in discussions of reading assignments and study questions.

CII_606 - REGRESSION ANALYSIS

Costas Christophi Spring Semester 4 ECTS (2.5 credits)

This course will introduce students to the practical application of multiple regression analysis in the context of biomedical and public health research. Linear regression, logistic regression and proportional hazards survival models will be covered, as well as general concepts on model selection, goodness-of-fit, and testing procedures. Each lecture will be accompanied by a data analysis and a classroom discussion of the results. The course will introduce, but will not attempt to develop, the underlying likelihood theory.

CII_608 - INTRODUCTION TO SAS FOR PUBLIC HEALTH

Stephania Papatheodorou Fall Semester 4 ECTS (2.5 credits)

This course is designed to introduce the students to the use of SAS software for data analysis in Epidemiology and Biostatistics. Students will learn to create SAS datasets from "raw" (ASCII) data and data from other programs (e.g. Stata, Excel, Access), create new variables and modify existing ones, understand arrays, combine and reshape SAS datasets, produce simple reports, program some basic SAS PROCs, produce graphics with various PROCs and debugging SAS programs.

CII_580 - PRACTICUM IN ENVIRONMENT AND PUBLIC HEALTH

CII Faculty Throughout Academic Year 32 ECTS (20.0 credits)

The EPH Practicum is intended to provide MS candidates with the opportunity to apply and integrate the principles and methods from their coursework to analyse a question in environmental or public health science or policy. A secondary goal of the EPH Practicum is to improve our students' ability to synthesize and present their ideas – in both an oral presentation and a scientific manuscript. The practicum is intended to be the culminating experience in the MS program, and is not dissimilar from a master's thesis.

Each student is asked to select an environmental or public health question of interest to them; to conduct a literature review; to identify and recruit as their practicum advisor a CII faculty member with expertise and experience relevant to the core scientific questions; to devise a plan for conducting a full quantitative analysis of the issue; and then to conduct the analysis and present the results.

While all projects must address questions of environmental/public health science or policy, projects may be framed in various ways. The written presentation will take the form of a scientific manuscript suitable for submission to an appropriate scientific journal (and formatted in the style, with attention to the length restrictions, of the journal). The oral presentation will be in the form of a 15 minute talk with 5 minutes of questions – appropriate for delivery at a scientific conference.

The EPH Practicum will be conducted over a period of one year – with problem identification and literature review in the spring term; development of an analytic plan; preliminary analysis and oral presentation in the summer session; and final analysis and write-up concluded in the fall term of the 2nd year of study. The course grade will be based on an evaluation of the final paper and presentation.

The best papers will be considered for submission as posters or presentations at appropriate scientific meetings (ISEE, ISEA, SRA) and may be developed for submission to leading scientific journals in the field.