## **COURSE OUTLINE**

## (1) GENERAL

SCHOOL	School of Health Sciences			
ACADEMIC UNIT	Faculty of Medicine			
LEVEL OF STUDIES	Undergraduate			
COURSE CODE	IAE905		SEMESTER	10th
COURSE TITLE	Leukemias			
<b>INDEPENDENT TEACHING ACTIVITIES</b> if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits		WEEKLY TEACHINC HOURS	G CREDITS	
Lectures, Demonstration of PCR and flow cytometry, ward rounds, presentation of a scientific/medical article		2	2	
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).				
COURSE TYPE general background, special background, specialised general knowledge, skills development	Specialised	knowledge		
PREREQUISITE COURSES:	No			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek			
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes			
COURSE WEBSITE (URL)	http://ecourse.uoi.gr/course/view.php?id=1113			

### (2) LEARNING OUTCOMES

#### Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Guidelines for writing Learning Outcomes

The course offers gaining of knowledge regarding the diagnosis and management of acute and chronic myeloid leukemia, that also includes basic knowledge of applied molecular biology, use of the microscope, transfusion medicine, diagnosis and management of infections in the immunocompromised patient, basic principles of allogeneic transplantation and basic principles of clinical research.

The course is tought in combination with clinical and laboratory practice in groups of 3-4 students. At the end of the course the students should be able to recognize the clinical and laboratory presentation of leukemia, to discuss with the patient and the relatives regarding the diagnosis and prognosis of the disease, to perform a bone marrow biopsy, to gain basic experience in molecular techniques, to prescribe a cytotoxic regimen, to know how to search for literature regarding the subject.

#### **General Competences**

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology Adapting to new situations Decision-making Working independently Team work Working in an international environment Working in an interdisciplinary environment Production of new research ideas Project planning and management Respect for difference and multiculturalism Respect for the natural environment Showing social, professional and ethical responsibility and sensitivity to gender issues Criticism and self-criticism Production of free, creative and inductive thinking

Others...

## Working independently Decision-making Team work

## (3) SYLLABUS

Epidemiology and WHO Classification of Leukemias.

Clinical presentation and molecular mechanism of leukemogenesis,

Breaking bad news, discussing the diagnosis and prognosis.

Diagnosis of leukemia/Blasts: morphology in the peripheral blood and bone marrow smear.

Allogeneic hematopoietic stem cell transprantation: basic principles, indications and procedure.

Treatment options. Application of cytogenetic and molecular analyses: qPCR, minimal residual disease.

Videos of procedures: venpucture, bone marrow aspirate and biopsy, central catheter.

Clinical and translational research, international research networks. Demonstration of Flow cytometry in acute leukemia sample (group of 3 students), demonstration of biobanking, detection of PML/RARa transcript by PCR (group of 3 students). Demonstration of peripheral blood and bone marrow smear microscopy (8-10 smears from patients with acute or chronic myeloid leukemia).

Participation in a bone marrow biopsy precedure. Participation in the diagnosis and management of a patient with leukemia.

Participation in the prescription and administration of cytotoxic chemotherapy and hypomethylating treatment.

## (4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face-to-face		
Face-to-face, Distance learning, etc.			
<b>USE OF INFORMATION AND</b>	Use of ICT in teaching, laboratory education, communication with students, use of the electronic platform e-course		
COMMUNICATIONS TECHNOLOGY			
Use of ICT in teaching, laboratory education,			
communication with students			
TEACHING METHODS	Activity	Semester workload	
The manner and methods of teaching are	Lectures	16	
described in detail.	Microscopy of peripheral	8	
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography,	blood and bone marrow		
tutorials, placements, clinical practice, art	slides		
workshop, interactive teaching, educational	Presentation of a recent	10	
visits, project, essay writing, artistic creativity,	scientific paper from the		
etc.	international literature		
The student's study hours for each learning	Clinics	4	
activity are given as well as the hours of non-	Personal Studying	10	
directed study according to the principles of the ECTS	Course total	50	
STUDENT PERFORMANCE			

EVALUATION	Oral examination (50 %) comprising of:
Description of the evaluation procedure	- Evaluation of diagnostic possibilities
Language of evaluation, methods of	- Solving problems related to the management of
evaluation, summative or conclusive, multiple	patients with certain types of leukemia .
choice questionnaires, short-answer questions, open-ended questions, problem solving,	Clinical scenarios.
written work, essay/report, oral examination,	
public presentation, laboratory work, clinical	II . Critical presentation of scientific paper related to
examination of patient, art interpretation, other	Leukemias (50 %)
Specifically-defined evaluation criteria are	
given, and if and where they are accessible to students.	

# (5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography: - Related academic journals: -Essential Haematology, A.V. HOFFBRAND, P.A.H. MOSS, J.E. -Scientific/Medical Articles from : Blood, Haematologica, NEJM