Course Title	Dermatology - Skin Physiology				
Course Code	PHA 701				
Course Category	Compulsory				
Level	Postgraduate/Master				
Year / Semester	1st year, (1st semester)				
Teacher's Name	G. Koulermou, A. Varvaresou, N Drakoulis, G.A. Karikas				
ECTS	8	Lectures / Week	3	Laboratory / Week	-
Aim and objectives of the course	The course seeks to educate students on the subject of Dermatology and Dermatopharmacology. Basic knowledge of skin anatomy and physiology will be taught, as well as the study of pathophysiological biochemical mechanisms and the most common skin problems and injuries. Through Dermatopharmacology, special emphasis will be given to the treatment of pathological skin conditions and the role of cosmetics. In the same context, the pharmacodynamics, pharmacokinetics, and pharmacogenomics (genes, proteins, and the role of genetic polymorphisms in skin diseases) of xenobiotics in general, in the human body, will be given in particular.				
Learning outcomes	Upon completion of the course students will be able to: (a) Describe the anatomy and physiology of the skin and its components. (b) Recognize common skin dysfunctions and mild skin problems (c) Analyze the causes of skin conditions. (d) Explain the Pathological Biochemistry, Pharmacokinetics and Pharmacogenomics of xenobiotics. (e) Evaluate the biological and cosmetic role of cosmetics				
Pro-required	-	Co-required	-		
Course content	• Anatomical structure of the skin. Skin components (hair - its chemical structure, sweat and sebaceous glands, sebum, sweat - chemical composition). Layers of skin, skin pigments, sensory nerves, blood vessels, nail glands • Skin physiology. • Health and skin, treatment of mild skin problems				

	• Skin dysfunctions, phototoxicity • Abnormal skin conditions and their causes • Burns / injuries • Elements of Pathological Biochemistry • Introduction to the treatment of pathological skin conditions • Concise Dermatopharmacology • Pharmacodynamics / Pharmacokinetics of xenobiotics in the human body • Pharmacogenomics: (genes, proteins and the role of genetic polymorphisms in skin diseases) • Role / importance of cosmetics and their mechanism of action.
Teaching Methodology	The theoretical part of the course is offered through lectures and discussions. Discussion with students includes questions / answers, pros / cons, role play and case studies. In addition, recent research findings and reviews are included. Detailed notes with PowerPoint are used in teaching.
Bibliography	**Bibliography in Greek**: • Clinical Dermatology with Color Images. Du Vivier. Publications: Broken Hill Publishers Ltd., 2012 • Clinical Biochemistry G Beckett, S. Walker, P. Rae, P. Ashby, 7th Edition Parisianos, 2010 • Laboratory diagnosis manual. Th. Protopapa 4th Edition of Parisianou, 2015 • Pharmacology (8th ed.) HP RANG, J. RITTER, R. FLOWER, G. HENDERSON. Edited by G. KARAKIOULAKIS. Parisianos Publications, 2018 • Pharmacokinetics in simple words. D. Birkett, Parisian Publications, 20 **Bibliography in English:** • Atlas of Clinical Dermatology. Du Vivier, 4th Edition, 2013 • Pharmacogenomics Editors: Yui-Wing Francis Lam, Stuart Scott • eBook ISBN: 9780128126271, 2nd Edition - November 27, 2018
Evaluation	1. <u>Final examination (60%)</u> The final exam is a written exam and is scheduled during the exam period at the end of the semester. The subject matter is determined by the teacher and communicated in a timely manner to the students. 2. <u>Mid-term examination (25%)</u> The midterm exam is a written exam and is scheduled within the semester (6th - 8th week of courses). The subject matter is determined by the teacher and communicated in a timely manner to the students.

	3. Submission - Presentation of project (15%) This work is individual or group and concerns the elaboration of a small-scale research project. Students are expected to design and implement small-scale research, (including literature review, methodology, presentation of results and discussion) and present their research to their classmates as part of the course and assessment.
Language	Greek / English