Course Title	Cosmetology I				
Course Code	PHA703				
Course Category	Compulsory				
Level	Postgraduate (Master)				
Year / Semester	1st year (1st semester)				
Teacher's Name	A. Varvaresou, C. Triantis, P. Dallas, S. Karavergou				
ECTS	8	Lectures / Week	2	Εργαστήριο / Βδομάδα	15* / semester
Course Purpose	The course seeks to educate students in the subject of Cosmetology. The ingredients and forms used in Cosmetology are analyzed, which include cosmetic skin products such as face and body, as well as products for hair, nails, etc. In addition, special products are analyzed, such as for baby care, sun protection. The long historical path of Cosmetology will lead to a better understanding of its time course up to the newest products and modern cosmetic forms. At the same time, special emphasis will be placed on possible interactions of cosmetics with prescription drugs as well as specific diseases. Finally, the laboratory part of the course seeks to train students in the techniques applied to cosmetic products, emphasizing the isolation and qualitative / quantitative control of ingredients used or detected in the final forms. In addition, microbiology laboratory training is included in the course.				
Learning outcomes	(a) Understand the subject of Cosmetology and recognize the means used for their preparation (b) Recognize the role and properties of ingredients, such as surfactants, antioxidants, preservatives, dyes, water, etc. (c) Understand the chemistry and technology of cosmetic products for the skin e.g. emulsions, cleaning products, sunscreens, bleaches. (d) Understand the chemistry and technology of cosmetics for hair, nails, mouth and teeth (e) Evaluate the properties of newer ingredients and modern forms (f) Recognize possible interactions with prescription drugs				

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<tr><td></td><td colspan="3">(g) Apply laboratory techniques to isolate and control important components of care products

(h) provide basic knowledge on the microbiological safety for cosmetic products and preventing microbial risks when developing cosmetics.</td></tr>
<tr><td>Pro-required</td><td>-</td><td>Co-required</td><td>-</td></tr>
<tr><td>Course content</td><td colspan="3">Theory

• Elements of History and subject of Cosmetology
• Means / forms used by Cosmetology
• Cosmetic forms / products, surfactants, properties, their uses,
• Antioxidants, preservatives, dyes, water
• Skin cosmetics, skin care for babies and children,
• Skin protection creams, skin astringents.
• Face masks, sunscreens, skin whiteners,
• Coating powders, Bath products,
• Hair cosmetics, hair dye products, hair dyes,
• Cosmetics for nails, mouth and teeth.
• Newer ingredients: anti-aging, antioxidants, antimicrobials, proteolytics, probiotics, prebiotics.
• Nanocosmetic forms
• Interactions of cosmetics and prescription drugs

Indicative workshops include:

• Isolation by distillation of essential oils
• Isolation of phenolic compounds from Thymus vulgaris
• Separation of a mixture of phenolic compounds, by high performance liquid chromatography
• Measurement of antioxidant activity of phenolic compounds / flavonoids
• Determination of formaldehyde in mascara
• Determination of aniline in hair dyesMicrobiological control of cosmetics / supplements
• Determination (iodiometric) of vitamin C in a dietary supplement
• Microbiological tests and evaluations of cosmetic products such as test method for the efficacy of antimicrobial preservation and its evaluation</td></tr>
<tr><td>Teaching Methodology</td><td colspan="3">The theoretical part of the course is offered through lectures and discussions. Methods such as discussion, questions/answers, pros/cons, brainstorming, debates, and cooperative learning are used to enhance the student’s participation. A debate-focused flipped classroom will be used to enhance student engagement, while also</td></tr>
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	improving learning outcomes. In addition, recent research findings and scientific article assessments are included.
Bibliography	**Bibliography in Greek** • Applied Cosmetology-Dermocosmetics. Tsirivas E, Varvaresou A, Papageorgiou S. Parisianos Publications, 2017 • Cosmetology. G. Papaioannou. Α.Σ. Publications Vego, 2018 **Bibliography in English** • Chemistry and Manufacture of Cosmetics", M. Schlossman, Allured Pub Corp; 4th ed. 2009 • Discovering Cosmetic Science. Barton S, Eastham A, Isom A, Mclaverty D, Ling Soong Y. RCC Publishing, 2020
Evaluation	1. Final examination (60%) 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. Mid-term examination (25%) 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 projects (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 experimental 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