



UNIVERSITY OF  
**PATRAS**  
ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΑΤΡΩΝ

DEPARTMENT OF PHARMACY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY OF PATRAS  
SCHOOL OF HEALTH SCIENCES  
DEPARTMENT OF PHARMACY  
POSTGRADUATE PROGRAM: **COSMETOLOGY - PREPARATION AND EVALUATION  
OF COSMETIC PRODUCTS**

COURSE TITLE: **QUALITY AND SAFETY TESTING OF COSMETIC PRODUCTS**  
CODE: **PHA-COS-21**

**MICROBIOLOGY  
COURSE OUTLINE**

**1. GENERAL**

<b>SCHOOL</b>	HEALTH SCIENCES		
<b>ACADEMIC UNIT</b>	DEPARTMENT OF PHARMACY		
<b>PARTICIPATING INSTITUTIONS</b>	-		
<b>TITLE of POSTGRADUATE PROGRAM</b>	COSMETOLOGY - PREPARATION AND EVALUATION OF COSMETIC PRODUCTS		
<b>LEVEL</b>	POSTGRADUATE		
<b>COURSE CODE</b>	PHA-COS-21	<b>SEMESTER</b>	B'
<b>COURSE TITLE</b>	QUALITY AND SAFETY TESTING OF COSMETIC PRODUCTS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>	<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>	
Courses	3	6	
<b>COURSE TYPE</b>	Field of Science		
<b>PREREQUISITE COURSES</b>	None		
<b>LANGUAGE of INSTRUCTION and EXAMINATIONS</b>	Greek		
<b>COURSE OFFERED to ERASMUS STUDENTS</b>	No		
<b>COURSE (URL)</b>	<a href="http://www.pharmacy.upatras.gr/images/DS/PHA-COS-21_EN.pdf">http://www.pharmacy.upatras.gr/images/DS/PHA-COS-21_EN.pdf</a>		

**2. LEARNING OUTCOMES**

<b>Learning Outcomes</b>
<p>By the end of this course the student will know</p> <ul style="list-style-type: none"> <li>• Techniques for testing the Quality of Cosmetic Products, such as: Physicochemical tests (Organoleptic Characteristics, Control of pH, viscosity, rheological properties,</li> <li>• The necessary Stability test protocols</li> <li>• The determination of the shelf life of products (Period After Opening, Minimum Shelf Life).</li> <li>• The required Cosmetic Product Safety tests.</li> <li>• The drafting of a Cosmetic Product Safety Assessment Report, Risk Assessment.</li> </ul>
<b>General Competences</b>
<p>By the end of this course the student will, furthermore, have develop the following general abilities (from the list above):</p> <p><i>Search, analysis and synthesis of data and information, using the necessary technologies</i></p> <p><i>Decision making</i></p> <p><i>Autonomous (Independent) work</i></p> <p><i>Group work</i></p>

### 3. SYLLABUS

LECTURES
<ul style="list-style-type: none"> <li>• Quality Control of Cosmetic Products: Physicochemical tests (Organoleptic Characteristics, Control of pH, viscosity, rheological properties,</li> <li>• Stability test protocols – Determination of shelf life (Period After Opening, Minimum Shelf Life).</li> <li>• Cosmetic Product Safety test:</li> <li>• Cosmetic Product Safety Assessment Report, Risk Assessment.</li> <li>• In vitro Safety Assessment Methods (eg HET-CAM tests).</li> </ul>

### 4. TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b>	In the classroom	
<b>USE of INFORMATION and COMMUNICATIONS TECHNOLOGY</b>	Learning process support through the e-class electronic platform to exchange files and lectures and to communicate with students. Lectures and presentations are all done using Information and Communication Technologies (ICTs) and information is searched through relevant databases.	
<b>TEACHING METHODS</b>	<b>Activity</b>	<b>Semester Workload</b>
	Lectures	60
	Literature study	50
	Assignment – Presentation of a relevant topic from the international literature	40
	<b>Course Total (25 hours of work-load per ECTS credit)</b>	<b>150</b>
<b>STUDENT PERFORMANCE EVALUATION</b>	Language of Evaluation: Greek	
	1. Written final exam (80%) which includes	
	<ul style="list-style-type: none"> <li>• Short development questions</li> <li>• Critical thinking Questions</li> </ul>	
	2. Assignment – Cosmetic Product Safety test and preparation of a Cosmetic Product Safety Assessment Report (Risk Assessment) (20%)	

### 5. RECOMMENDED BIBLIOGRAPHY

<ol style="list-style-type: none"> <li>1. Handbook of Cosmetic Science and Technology, André O. Barel, Marc Paye, Howard I. Maibach, eds, Marcel Dekker, Inc. New York • Basel, 2001, ISBN: 0-8247-0292-1</li> <li>2. Formulas, Ingredients and Production of Cosmetics Technology of Skin- and Hair-Care Products in Japan Hiroshi Iwata, Kunio Shimada eds, Springer Tokyo Heidelberg New York Dordrecht London 2013, ISBN 978-4-431-54060-1</li> <li>3. New Cosmetic Science T. Mitsui ed, Elsevier the Netherlands 1998, ISBN 0 444 82654 8</li> <li>4. Chemistry and Technology of the Cosmetics and Toiletries Industry, Williams, D.F., Schmitt W.H eds, Springer Science+ Business Media New York 1992. ISBN 978-94-010-5007-4</li> <li>5. THE SCCS NOTES OF GUIDANCE FOR THE TESTING OF COSMETIC INGREDIENTS AND THEIR SAFETY EVALUATION</li> </ol>
--