



**UNIVERSITAS NEGERI SURABAYA**  
**FACULTY OF MATHEMATICS AND NATURAL SCIENCE**  
**UNDERGRADUATE PROGRAMME OF CHEMISTRY**

**Document  
Code**

**SEMESTER LEARNING ACTIIVITY PLAN**

COURSE		CODE	Course Group	Credit Unit	Semester	Date
Cosmetic Chemistry		3074112070	-	2	5 <sup>th</sup>	
AUTHORIZATION CHEMISTRY		Compiler		Coordinator		Head of Study Program
		Prof. Dr. Titik Taufikurohmah, M.Si.		Dr. Nuniek Herdyastuti, M.Si.		Dr. Amaria, M.Si.
Learning Outcomes		Program Learning Outcomes (PLO)				
PLO1 (KNO-1)		Able to master the concepts of structure, dynamics and energy, as well as the basic principles of separation, analysis, synthesis, and characterization of micromolecular compounds and their applications				
PLO4 (SKI-2)		Able to design an activity to solve problems by implementing capabilities in the field of chemistry that refers to ecopreneurship				
		Course Learning Outcomes (CLO)				
CLO1		Students have knowledge of the basic principles of chemical aspects in the cosmetic field in terms of the initial understanding of the definition of cosmetics, the main functions of cosmetics, the classification of cosmetics from various reviews, the constituent materials of cosmetics, the process of making cosmetics in terms of physical chemistry, essential ingredients in cosmetics, hazardous ingredients in cosmetics, manufacture of cosmetics that are safe for health, traditional cosmetics, development of cosmetic research and preparation of cosmetic patents.				
CLO2		Students are skilled in using tools in the process of making cosmetic preparations and analyzing cosmetic products in terms of the ingredients that make up cosmetics, the process of making cosmetics in terms of physical chemistry, essential ingredients in cosmetics, hazardous ingredients in cosmetics, making cosmetics that are safe for health, traditional cosmetics and cosmetic research development.				
CLO3		Students have the ability to cooperate in the process of making cosmetic preparations and analyzing cosmetic products in terms of cosmetic constituent materials, the cosmetic manufacturing process in terms of physical chemistry, essential				

		ingredients in cosmetics, hazardous ingredients in cosmetics, making cosmetics that safe for health, traditional cosmetics and cosmetic research development.
	CLO4	Students have the ability to define the basic principles of chemical aspects in the cosmetic field in terms of the initial understanding of the definition of cosmetics, the main functions of cosmetics, the classification of cosmetics from various reviews, the constituent materials of cosmetics, the process of making cosmetics in terms of physical chemistry, ingredients essential in cosmetics, hazardous ingredients in cosmetics, manufacture of cosmetics that are safe for health, traditional cosmetics, development of cosmetic research and preparation of cosmetic patents.
	CLO5	Students have a responsible attitude towards the process of making cosmetic preparations and analyzing cosmetic products in terms of cosmetic constituent materials, cosmetic manufacturing processes which are reviewed in physical chemistry, essential ingredients in cosmetics, hazardous ingredients in cosmetics, safe cosmetic manufacture for health, traditional cosmetics and cosmetic research development.
	<b>Sub CLO</b>	
	Sub-CLO1	Describe Cosmetology and Cosmetic Chemistry
	Sub-CLO2	Recognizing cosmetic ingredients from their physical properties and chemical structures
	Sub-CLO3	Able to know the active ingredients of cosmetics
	Sub-CLO4	The practice of making cosmetic preparations; morning cream, night cream, moisturizing cream, whitening cream and facial soap
	Sub-CLO5	Cosmetic analysis
	Sub-CLO6	Cosmetic research development
	Sub-CLO7	Compilation of cosmetic patents
<b>Brief Description of the Course</b>	This course is contain Cosmetology and Cosmetic chemistry, Physical properties and chemical structure of cosmetic ingredients, Cosmetic active ingredients, Manufacturing of cosmetic preparations; morning cream, night cream, moisturizing cream, whitening cream and facial soap, Cosmetic analysis, Cosmetic research development, Compilation of cosmetic patents with Individuals assignment, group assignment, discussion, presentation and practicum as the learning methods.	
<b>Study Materials: Learning Materials</b>	<ul style="list-style-type: none"> <li>• Cosmetology and Cosmetic chemistry</li> <li>• Physical properties and chemical structure of cosmetic ingredients</li> <li>• Cosmetic active ingredients</li> <li>• Manufacturing of cosmetic preparations; morning cream, night cream, moisturizing cream, whitening cream and facial soap</li> <li>• Cosmetic analysis</li> <li>• Cosmetic research development</li> <li>• Compilation of cosmetic patents</li> </ul>	
<b>Reference</b>	<b>Main :</b>	

	<ol style="list-style-type: none"> <li>1. Retno I.S.Tranggono , 2006, "Ilmu Pengetahuan Kosmetik, Penerbit Gramedia Jakarta Indonesia.</li> <li>2. Shaath N.A., 1990, <i>Sunscreens, Development, Evaluation, and Regulatory Aspects</i>, Marcel Dekker, INC, New York.</li> <li>3. Kreps, S.I., Goldenberg, 1972, <i>Suntan Preparation in Balsam MS, Cosmetic Science and Technology</i>, 2<sup>nd</sup> ed, John Wiley &amp; Sons, Inc.</li> <li>4. Harry R.G., 1982, Harry's Cosmeticology, 6<sup>th</sup> edition, <i>The Principle and Practice Of Modern Cosmetic</i>, Leonard Hill Book, London</li> </ol>						
	<b>Additional :</b>						
	<ol style="list-style-type: none"> <li>5. Taufikurohmah T, 2014, Kimia Kosmetik, edisi pertama.</li> <li>6. Taufikurohmah T, 2015, Kimia Kosmetik, edisi kedua.</li> </ol>						
<b>Lecturer</b>	Prof. Dr. Titik Taufikurohmah, M.Si. Rusmini, S.Pd., M.Si.						
<b>Prerequisite courses</b>	Basic chemistry, Inorganic Chemistry, Analytical Chemistry, Organic Chemistry, Physical Chemistry						
Meeting	The final ability of each activity	Assessment		Learning Forms, Learning Methods, Student Assignment		Reference	Rating Weight (%)
		Indicator	Criteria & Form	Offline	online		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Describe Cosmetology and Cosmetic Chemistry	Able to explain the scope of the material and the limitations of both	Essay Writing Test	Using the lecture method and interactive discussion	-	Reference no. 1, 4, 5 and 6	10
2-3	Recognizing cosmetic ingredients from their physical properties and chemical structures	Able to recognize the properties of the ingredients that make up cosmetic formulas, their functions and compositions in cosmetic formulas	Essay Writing Test	Lectures and material introduction demos in front of the class	-	Reference no. 2, 3, 5 and 6	15
4-5	Able to know the active ingredients of cosmetics	Able to recognize cosmetic active ingredients, their relationship to the type of formula and their composition in	Essay Writing Test	Lectures and demonstrations introducing materials in front of the class	-	Reference no. 2, 3, 5 and 6	20

		cosmetics, also able to recognize harmful ingredients in cosmetics					
<b>6-7,9</b>	The practice of making cosmetic preparations; morning cream, night cream, moisturizing cream, whitening cream and facial soap	Able to make cosmetic preparation formulas and able to make 4 main types of cream in cosmetics and various facial soaps	Essay Writing Test	Laboratory Practice	-	Reference no. 2, 3, 5 and 6	<b>25</b>
<b>8</b>	<b>Mid-Term Exam</b>						
<b>10-11</b>	Cosmetic analysis	Able to analyze certain compounds in cosmetics, especially Hg, Hg and other heavy metals	Essay Writing Test	Interactive lecture	-	Reference No. 1 to No. 6	<b>10</b>
<b>12-13</b>	Cosmetic research development	Able to explain research ideas, design and research analysis in the field of cosmetics	Essay Writing Test	Interactive lecture	-	Reference No. 1 to No. 6	<b>10</b>
<b>14-15</b>	Compilation of cosmetic patents	Able to compile a detailed process of making cosmetic formulas in patent format	Essay Writing Test	Interactive lecture	-	Reference No. 1 to No. 6	<b>10</b>
<b>16</b>	<b>Final Exams</b>						<b>100</b>