

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-4.0E
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Study Plan No.	2021/2022		University Specialization		Bachelor of Pharmacy	
Course No.	0201426		Course Name		Cosmetic Products	
Credit Hours	2		Prerequisite *Co-requisite		Pharmaceutical Dosage Forms 2	
Course Type	☐ Mandatory University Requirement	☐ University Elective Requirement	☐ Faculty Mandatory Requirement	☐ Support course family requirements	☒ Mandatory Requirement	☐ Elective Requirement
Teaching Style	☐ Full Online Learning		☒ Blended Learning		☐ Traditional Learning	
Teaching Model	☐ 2 Synchronous: 1 Asynchronous		☒ 1 Face to Face: 1 Synchronous		☐ 3 Traditional	

Faculty Member and Study Divisions Information (to be filled in each semester by the subject instructor)

Name	Academic rank	Office No.	Phone No.	E-mail	
Office Hours (Days/Time)					
Division number	Time	Place	Number of Students	Teaching Style	Approved Model
				Blended Learning	1 Face to Face: 1 Synchronous

Brief Description

This course is designed to enrich pharmacy students with knowledge, skills and competencies as manufacturers in the field of cosmetic products. The course aims to introduce the students to the regulations of cosmetics preparations, product development and scale up principles. In addition, the students are introduced to the various ingredients and materials used in cosmetic products and preparations. Moreover, the students are introduced to the artifact of manufacture techniques to optimize the cosmetic formulations/ product and evaluate it properly.

Learning Resources

Course Book Information (Title, author, date of issue, publisher ... etc)	1- "Harry's Cosmeticology", Ralph Gordon Harry, Chemical Publishing Company; 9 th edition (April 1, 2015) 2- Handbook of Cosmetic Science and Technology, Andre O. Barel, Marc Paye, and Howard I. Maibach, Marcel Dekker, 3rd edition 2009			
Supportive Learning Resources (Books, databases, periodicals, software, applications, others)	British Pharmacopeia, 2010.			
Supporting Websites	https://www.fda.gov/cosmetics			
The Physical Environment for Teaching	☒ Classroom	☐ Labs	☒ Virtual Educational Platform	☐ Others
Necessary Equipment and Software	- Moodle.			
Supporting People with Special Needs				
For Technical Support	E-Learning & Open Educational Resources Center. Email: ellearning@zu.edu.jo ; Phone: +962 6 429 1511 ext. 425/362.			

Course learning outcomes (K= Knowledge, S= Skills, C= Competencies)

No.	Course Learning Outcomes	The Associated Program Learning Output Code
Knowledge		
The student should be able to:		
K1	Describe the regulations regarding cosmetic products and the different ingredients and techniques used in cosmetic industry.	MK2
Skills		
The student should be able to:		
S1	Classify the cosmetic products: nail polish, colorant cosmetics, baby product, skin bleaching, sun care products, bleachers, cleansing agents and acne preparations, oral care products, ageing and moisturizers.	MS4
S2	Design the appropriate cosmetic product that meets the demand of the end user.	MS2
Competencies		
The student should be able to		
C1	Justify the design of cosmetic products.	MC2
C2	Evaluate the cosmetic products and appropriate product development practice.	MC3

Mechanisms for Direct Evaluation of Learning Outcomes

Type of Assessment / Learning Style	Fully Electronic Learning	Blended Learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
Midterm Exam	%30	%30	%30	0%
Participation / Practical Applications	0	0	%30	60%
Asynchronous Interactive Activities	%30	%30	0	0
Final Exam	%40	%40	%40	40%

Note: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Schedule of Simultaneous / Face-to-Face Encounters and their Topics

Week	Subject	Learning Style*	Reference **
1	Introduction to cosmetics. The substrates: Skin, Hair and Nail	Lecture	Harry's Cosmeticology Chapters 1-5 Pages (3-79)
2	Regulatory requirements of cosmetic products	Lecture	Harry's Cosmeticology Chapter 7

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			Pages (129-173)
3	Fundamentals of cosmetic product development	Lecture Learning through problem solving in class	Harry's Cosmeticology Chapter-6 pages (111-120)
4	Anti-acne and Oily skin products Skin cleansing products	Lecture Learning through flipped learning in class room	Harry's Cosmeticology Chapter 22 pages (459-469) Chapter 24 pages (486-500)
5	Sunblock, sun screen, after exposure to sun protection preparations and tanning preparations	Lecture	Harry's Cosmeticology Chapter 20 Pages(415-435)
6	Aging physiology and anti-wrinkles preparations	Lecture	Harry's Cosmeticology Chapter 1 pages (34-35) Chapter 7 pages (141) Chapter 19 pages (375-385)
7	Skin bleaches and others Face, body and hair masks and scrubs	Lecture	Harry's Cosmeticology Chapter 19 pages (393-415) Chapter 23 (471-480)
8	Nails Care Products: Midterm exam	Lecture	Harry's Cosmeticology Chapter 27 pages (573-588) Chapter 28 (590-595)
9	Color cosmetics	Lecture	Harry's Cosmeticology Chapter 26 pages (523-570)
10	Oral care product	Lecture	Harry's Cosmeticology Chapter 33 pages (725-753)
11	Baby care Products.	Lecture	Handbook of cosmetic science and technology. Chapters 60 pages (613-620)
12	Hair preparations: Shampoos, Hair setting products, colorants Hair straightening, Depilatories,	Lecture	Harry's Cosmeticology Chapters (29-32) pages (601-655)

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	Hair tonics and conditioners.		
13	Hair colorants. Permeant waving	Lecture	Harry's Cosmeticology Chapters (31-32) pages (669-694) (695-724)
14	Antiperspirants and deodorants Manufacture of cosmetics	Lecture	Harry's Cosmeticology Chapters (21) pages (437-458) Chapter 35 pages (787-874)
15	Packaging and stability	Lecture	Harry's Cosmeticology Chapters (36 & 37) pages (875-899)
16	Final Exam		

* Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.

** Reference: pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.

Schedule of Asynchronous Interactive Activities (in the case of e-learning and blended learning)

Week	Task / Activity	Reference	Expected Results
1	Recorded lecture Introduction		
2	Recorded lecture Prepare video from FDA official website	https://www.fda.gov/cosmetics	Submitted video on using FDA website
3	Recorded lecture	Harry's Cosmeticology	Answering quiz
4	Recorded lecture	Harry's Cosmeticology	Answering quiz
5	Recorded lecture	Harry's Cosmeticology	Answering quiz
6	Recorded lecture	Harry's Cosmeticology	Interactive video
7	Recorded lecture	Harry's Cosmeticology	Interactive video
8	Recorded lecture	Harry's Cosmeticology	Midterm
9	Recorded lecture	Harry's Cosmeticology	Poster on MoCRA
10	Recorded lecture	Harry's Cosmeticology	Poster on different AI tools as knowledge source in cosmetic industry and dispensing
11	Recorded lecture	Harry's Cosmeticology	Answering quiz
12	Recorded lecture	Harry's Cosmeticology	Assignment
13	Recorded lecture	Harry's Cosmeticology	Interactive video/puzzle
14	Recorded lecture	Harry's Cosmeticology	Assignment
15	Recorded lecture	Harry's Cosmeticology	Assay on product development-student choice
16	Final Exam		