|  |  |  |  |
| --- | --- | --- | --- |
| **Study Plan No.** | **2021/2022** | **University Specialization** | **Bachelor of Pharmacy** |
| **Course No.** | **0201426** | **Course Name** | **Cosmetics Products** |
| **Credit Hours** | **2** | **Prerequisite** **\*Co-requisite** | **Pharmaceutics 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** | * **1 Synchronous: 1 Asynchronous**
 | * **1 Face to Face: 1 Asynchronous**
 | * **2 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)** | **Sunday, Tuesday, Thursday ()** | **Monday, Wednesday ()** |
| **Division number** | **Time** | **Place** | **Number of Students** | **Teaching Style** | **Approved Model** |
|  |  |  |  | **Blended Learning** | **1 Face to Face: 1 Asynchronous** |

**Brief Description**

|  |
| --- |
| This course aims to provide students with proper knowledge and understanding of cosmetic preparations, their ingredients, and their method of manufacture. The course will also cover regulatory aspects involved in the development of new cosmetic products.  |

**Learning Resources**

|  |  |
| --- | --- |
| **Course Book Information**(Title, author, date of issue, publisher ... etc) | 1. Harry’s Cosmeticology, Ralph Gordon Harry, Chemical Publishing Company; 9th Edition, 2015.
 |
| **Supportive Learning Resources**(Books, databases, periodicals, software, applications, others) | 1. British Pharmacopeia, 2010.
2. Handbook of Cosmetic Science and Technology, Andre O. Barel, Marc Paye, Howard I. Maibach, and Marcel Dekker, 3rd Edition, 2009
 |
| **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: elearning@zuj.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** | Outline the FDA regulations regarding cosmetic products. | **MK2** |
| **K2** | Differentiate between various national regulations and track those variations upon registration of cosmetic products.  | **MK2** |
| **K3** | Classify cosmetic products according to their ingredients, applications, and registration requirements.  | **MK2** |
| **K4** | Identify the ingredients of cosmetic products and their functions. | **MK2** |
| **Skills****The student should be able to:** |
| **S1** | Design the appropriate cosmetic product that meets the demand of the end user. | **MS2, MS4** |
| **S2** | Select the appropriate quality control tests to evaluate cosmetic products. | **MS4** |
| **Competencies****The student should be able to** |
| **C1** | Raise customers’ awareness regarding potentially deceptive advertising of cosmetic products. | **MC2** |
| **C2** | Take responsibility for his/her own learning by following up with the weekly tasks and submitting assignments on time. | **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%** | **20%** | **50%** |
| **Asynchronous Interactive Activities** | **20%** | **20%** | **0%** | **0%** |
| **Final Exam** | **50%** | **50%** | **50%** | **50%** |

***Note 1:*** *Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, and 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.*

***Note 2:*** *According to the Regulations of granting Master’s degree at Al-Zaytoonah University of Jordan, 40% of final evaluation goes for the final exam, and 60% for the semester work (examinations, reports, research or any scientific activity assigned to the student).*

**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 | Participatory learning | Ref. 1, Ch. 1-5pp. 3-79 |
| **2** | Regulatory requirements of cosmetic products | Participatory learning | Ref. 1, Ch. 7pp. 129-173 |
| **3** | Fundamentals of cosmetic product development | Flipped Learning | Ref. 1, Ch. 6pp. 111-120 |
| **4** | Anti-acne and oily skin productsSkin cleansing products | Participatory learning | Ref. 1, Ch. 22pp. 459-469& Ch. 24 pp. 486-500 |
| **5** | Sunblock, sunscreen, after exposure to sun protection, and tanning preparations | Lecture | Ref. 1, Ch. 20pp. 415-435 |
| **6** | Aging physiology and anti-wrinkle preparations | Lecture | Ref. 1, Ch. 1pp. 34-35Ch. 7 pp. 141Ch. 19pp. 375-385 |
| **7** | Skin bleaches and others Face, body and hair masks and scrubs | Lecture | Ref. 1, Ch. 19pp. 393-415& Ch. 23pp. 471-480 |
| **8** | Nail care products | *learning through problem solving* | Ref. 1, Ch. 27pp. 573-588& Ch. 28 pp. 590-595 |
| **9** | Color cosmetics**Midterm Exam** | Lecture | Ref. 1, Ch. 26 pp. 523-570 |
| **10** | Oral care product | Lecture | Ref. 1, Ch. 33 pp. 725-753 |
| **11** | Baby care products | Lecture | Ref. 2, Ch. 60 pp. 613-620 |
| **12** | Hair preparations: Shampoos, hair setting products, colorants, hair straightening, depilatories, hair tonics and conditioners | Flipped Learning | Ref. 1, Ch. 29-32pp. 601-655 |
| **13** | Hair colorantsPermeant waving  | Lecture | Ref. 1, Ch. 31-32pp. 669-724 |
| **14** | Antiperspirants and deodorantsManufacture of cosmetics | Lecture | Ref. 1, Ch. 21pp. 437-458& Ch. 35 pp. 787-874 |
| **15** | Packaging and stability | *learning through problem solving* | Ref. 1, Ch. 36-37pp. 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 |  |  |  |
| 2 |  |  |  |
| 3 | * Regulatory affairs
* Product Development

Recorded lecture | * Harry’s Cosmeticology
* FDA website
 | Writing assay |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 | Essay on the role of antioxidants in anti-wrinkle preparations | Harry’s Cosmeticology | Answering assignment questions |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 | Anti wrinkle preparationsSkin bleachesRecorded Lecture | Harry’s Cosmeticology | Answering assignment question |
| 10 |  |  |  |
| 11 |  |  |  |
| 12 | Hair preparationsRecorded Lecture | Harry’s Cosmeticology | Answering questions |
| 13 |  |  |  |
| 14 |  |  |  |
| 15 |  |  |  |
| 16 |  |  |  |