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| **1** | **Course title** | Cosmetics Science |
| **2** | **Course number** | 1202536 |
| **3** | **Credit hours** | 2 (theory) |
| **Contact hours (theory, practical)** | 2 (theory) |
| **4** | **Prerequisites/corequisites** | 1202231 (Pharmaceutical Calculations and Compounding of Dosage Forms) |
| **5** | **Program title** | Pharmacy/PharmD |
| **6** | **Program code** |  |
| **7** | **Awarding institution** | The University of Jordan |
| **8** | **School** | Pharmacy |
| **9** | **Department** | Pharmaceutics and Pharmaceutical Technology |
| **10** | **Level of course** | Undergraduate |
| **11** | **Year of study and semester (s)** | 5th year |
| **12** | **Final Qualification** | Pharmacy/PharmD |
| **13** | **Other department (s) involved in teaching the course** |  |
| **14** | **Language of Instruction** | English |
| **15** | **Teaching methodology** | Blended Online |
| **16** | **Electronic platform(s)** | Moodle Microsoft Teams Skype Zoom  Others………… |
| **17** | **Date of production/revision** | 10/10/2020 |

**18 Course Coordinator:**

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| Name: Samer Abulateefeh  Office number: 230  Phone number: 06 5355000, Ext. 23367.  Email: [s.abulateefeh@ju.edu.jo](mailto:s.abulateefeh@ju.edu.jo) |

**19 Other instructors:**

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| Name: Bassam Amro  Office number:  Phone number:  Email: [amrob@ju.edu.jo](mailto:amrob@ju.edu.jo) |

**20 Course Description:**

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| This course covers the basics of cosmetic preparations, contents and their actions. (e.g. skin, hair and nail preparations). |

**21 Course aims and outcomes:**

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| **A- Aims:**  1. Provide students with an understanding of the morphology and chemical structure of skin, hair, nail and teeth systems.  2. Provide students with the ability to utilize this understanding in the design of active cosmetic dosage forms.  3. Provide the students with the ability to analyze the relationship between the physicochemical properties of cosmetic ingredients and biological activity of cosmetic products.  4. Provide the students with all categories of raw materials used in cosmetic formulations.  5. Be able to conduct pre-formulation studies.  6. Be able to choose the suitable preservative combination to suit different types of formulas.  **B- Intended Learning Outcomes (ILOs):**  Upon successful completion of this course, students will be able to:  **• Develop, integrate, and apply knowledge from the foundational sciences (Learner).**  1. Define the detailed structures of skin, hair, nail and dental systems; their chemistry and functions.  2. Demonstrate various types of active and inactive ingredients used in cosmetic products formulations.  3. Demonstrate various types of natural ingredients used in cosmetic products formulations.  4. Identify the function of each ingredient found in a cosmetic product.  5. Evaluate the composition and dosage forms of various cosmetic products.  6. Design formulations for cosmetic and cosmeceutical products.  7. Develop final cosmetic formulations.  **• Proactively investigates new knowledge, approaches or behavior and takes steps to evaluate and improve performance (self-learner)**  8. Seek actively new knowledge related to new cosmetic products and their applications by referring to the relevant scientific resources.  **• Problem solving and critical thinking (Problem Solver).**  9. Suggest solutions to the problems encountered during the manufacturing process of cosmetic product.  10. Advise people in cosmetic industry how to formulate a cosmetic product.  11. Advise customers and patients how to use and choose the most appropriate cosmetics.  **• Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society (professional).**  12. Communicate effectively and respectfully with professors and classmates.  13. Show responsibility, accountability and commitment by complying with tutor’s instructions and relevant university regulations.  14. Demonstrate integrity by not cheating and not committing plagiarism. |

**22. Topic Outline and Schedule:**

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| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Week** | **Lecture** | **Topic** | **Teaching Methods\*/platform** | **Evaluation Methods\*\*** | **References** | | 1 | 1.1 | Introduction and general concepts | Synchronous lecturing/meeting | Exams, Quizzes and Assignments | References provided below | | 1.2 | | 2 | 2.1 | Hair anatomy and physiology | Synchronous lecturing/meeting | | 2.2 | | 3 | 3.1 | Hair Cleansing and Conditioning Products | Synchronous lecturing/meeting | | 3.2 | | 4 | 4.1 | Hair coloring products | Synchronous lecturing/meeting | | 4.2 | | 5 | 5.1 | Skin anatomy and physiology | Synchronous lecturing/meeting | | 5.2 | | 6 | 6.1 | Skin cleansing products | Synchronous lecturing/meeting | | 6.2 | | 7 | 7.1 | Skin moisturizing products | Synchronous lecturing/meeting | | 7.2 | | 8 | 8.1 | Skin moisturizing products | Synchronous lecturing/meeting | | 8.2 | | 9 | 9.1 | Mid Exam |  | | 9.2 | | 10 | 10.1 | Products for aging | Synchronous lecturing/meeting | | 10.2 | | 11 | 11.1 | Products for acne | Asynchronous lecturing/meeting | | 11.2 | | 12 | 12.1 | Sun care products | Asynchronous lecturing/meeting | | 12.2 | | 13 | 13.1 | Deodorants and antiperspirants | Asynchronous lecturing/meeting | | 13.2 | | 14 | 14.1 | Oral and dental care products | Asynchronous lecturing/meeting | | 14.2 | | 15 | 15.1 | Nail care products | Asynchronous lecturing/meeting | | 15.2 | | 16 | 16.1 | Final Exam |  | | 16.2 | |

* Teaching methods include: Synchronous lecturing/meeting; Asynchronous lecturing/meeting
* Evaluation methods include: Homework, Quiz, Exam, pre-lab quiz…etc

**23 Evaluation Methods:**

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| Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Evaluation Activity** | **Mark** | **Topic(s)** | **Period (Week)** | **Platform** | | Mid Exam | 30 | Topics covered in Weeks 1-8 | 8th or 9th | On Campus | | Final Exam | 50 | All topics | 16th | On Campus | | Quiz | 10 | To be determined | 5th | Electronic | | Quiz or Assignment | 10 | To be determined | 12th | Electronic | |

**24 Course Requirements (e.g: students should have a computer, internet connection, webcam, account on a specific software/platform…etc):**

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| Students should have a computer/mobile phone, internet connection, webcam, account on E-learning and Microsoft Teams. |

**25 Course Policies:**

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| **A- Attendance policies:**  Attendance: Mandatory.  Failing in the subject – with 5 absences  **B- Absences from exams and handing in assignments on time:**  Will result in zero achievement unless health report or other significant excuse is documented.  **C- Health and safety procedures:**  Complies with the University/School protocols and guidelines.  **D- Honesty policy regarding cheating, plagiarism, misbehavior:**  The participation, the commitment of cheating will lead to applying all following penalties together  1) Failing the subject he/she cheated at  2) Failing the other subjects taken in the same course  3) Not allowed to register for the next semester. The summer semester is not considered as a semester  **E- Grading policy:**  Mid Exam: 30 points  Quizzes, assignments and presentations: 20 points  Final Exam: 50 points  Total 100 points  **F- Available university services that support achievement in the course:**  Library, access to electronic platforms. |

**26 References:**

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| A- Required book (s), assigned reading and audio-visuals:  • Introduction to cosmetic formulation and technology, Gabriella Baki and Kenneth S. Alexander.1st Edition, 2015, Published by John Wiley & Sons, Inc., Hoboken, New Jersey  B- Recommended books, materials, and media:  • Martin’s Physical Pharmacy and Pharmaceutical Sciences. 6th Edition. 2011.  Published by Lippincott Williams & Wilkins, USA.  • Pharmaceutical Practice, A.J. Winfield, J.A. Rees and I.Smith. 4th edition, 2009. Published by Churchill Livingstone. |

**27 Additional information:**

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Name of Course Coordinator: Samer Abulateefeh Signature: ------------------ Date: 10/10/2020

Head of Curriculum Committee/Department: ---------------------------- Signature: --------------------------

Head of Department: ------------------------------------------------------------ Signature: -----------------------

Head of Curriculum Committee/Faculty: ---------------------------------------- Signature: -------------------

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