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| **1** | **Course title** | SEMINAR IN PHARMACEUTICS & PHARMACEUTICAL TECHNOLOGY |
| **2** | **Course number** | 1202572 |
| **3** | **Credit hours** | 1 (theory) |
| **Contact hours (theory, practical)** | 1 (theory) |
| **4** | **Prerequisites/corequisites** | Pharmaceutical Technology I (1212331) or Pharmaceutical Technology II (1202333) |
| **5** | **Program title** | Pharmacy and Pharm D |
| **6** | **Program code** | NA |
| **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)** | Senior years |
| **12** | **Final Qualification** | Pharmacy B.Sc. and Pharm D |
| **13** | **Other department (s) involved in teaching the course** | NA |
| **14** | **Language of Instruction** | English |
| **15** | **Teaching methodology** | [ ] Blended [x] Online |
| **16** | **Electronic platform(s)** | [x] Moodle [x] Microsoft Teams [ ] Skype [ ] Zoom [ ] Others………… |
| **17** | **Date of production/revision** | Oct. 11th, 2020 |

**18 Course Coordinator:**

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| Name: Dr Mais SalehOffice number: 002Phone number: 286Email: mais.saleh@ju.edu.jo |

**19 Other instructors:**

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| Name: Dr Mais SalehOffice number: 002Phone number: 286Email: mais.saleh@ju.edu.joName: Dr Amal AlbakriOffice number:Phone number: 330Email: agbakri@ju.edu.joName: Dr Rula DarweeshOffice number:Phone number: 327Email: rulad@ju.edu.joName: Dr. Randa Haddadin Office number:Phone number: 314Email: r\_haddadin@ju.edu.joName: Dr Mahmoud AlkawareeqOffice number:Phone number: 342Email: m.alkawareek@ju.edu.jo |

**20 Course Description:**

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| As stated in the approved study plan.Preparation of a research project in pharmaceutics and pharmaceutical technology under supervision of faculty member, in which, at least, a presentation and oral discussion are required. |

**21 Course aims and outcomes:**

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| 1. Aims:
* Develop skills of performing literature review and extraction of information from scientific articles.
* Provide the students with an opportunity to integrate and apply the multiple components of their knowledge of basic pharmaceutical sciences to prepare mini review with all its structural components.
* Develop students’ presentations skills and encourage them to think critically

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 (Biomedical sciences, Pharmaceutical sciences, Clinical sciences, Social/behavioral/administrative); Learner.
1. Acquire detailed knowledge of major theories of the discipline(s) and awareness of a variety of ideas, contexts, and frameworks
* Communicate effectively with patients, caregivers, pharmacy personnel, other health care professionals, community members, policy makers and administrators; communicator.

2. Adapt to work independently and interact effectively within a team/learning group, giving and receiving information and ideas, and modifying responses where appropriate.* Communicate effectively in a manner appropriate to the discipline(s) and report practical procedures in a clear and concise manner in a variety of formats.
* Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution; Problem Solving and critical thinking (Problem Solver).

4. Identify key elements of problems and choose appropriate methods for their resolution in a considered manner.* Demonstrate self-directed learning through ongoing reflection and analysis to identify areas and methods necessary to expand professional knowledge and competence in a changing practice environment; Self-learner.

5. Analyze a range of information with minimum guidance using given classification /principles.6. Compare alternative methods and techniques for obtaining data.7. Select appropriate techniques of evaluation.8. Evaluate relevance and significance of the data collected.9. Reformat a range of ideas and information towards a given purpose.10. Manage learning using the different resources for the discipline.11. Manage information and select appropriate data from a range of sources.12. Develop proper research strategies.13. Take responsibility for own learning with minimal directions.* Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society; Professional.

14. Demonstrate integrity by not cheating and not committing plagiarism.15. Demonstrate respect to professors and classmates by observing active listening inside the classroom16. Evaluate own strengths and weaknesses, challenge received, and develop own criteria and judgment.C. Program Competencies Achieved:1. Learner: Develop, integrate, and apply knowledge from the foundational sciences (Biomedical sciences, Pharmaceutical sciences, Clinical sciences, Social/behavioral/administrative).2. Communicator: Communicate effectively with patients, caregivers, pharmacy personnel, other health care professionals, community members, policy makers and administrators.3. Problem Solving and critical thinking (Problem Solver): Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.4. Professional: Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.5. Self-learner: Demonstrate self-directed learning through ongoing reflection and analysis to identify areas and methods necessary to expand professional knowledge and competence in a changing practice environment. |

**22. Topic Outline and Schedule: *Attached to the end of the report*.**

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| **Week** | **Lecture** | **Topic** | **Teaching Methods\*/platform** | **Evaluation Methods\*\*** | **References** |
| 1 | 1.1 |   |   |   |   |
| 1.2 |   |   |   |   |
| 1.3 |   |   |   |   |
| 15.3 |   |   |   |   |

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

**. Teaching/Learning Methods and Assignments:**

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| *Development of ILOs is promoted through the following* ***teaching and learning*** *methods*:

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| ***ILO/s*** | ***Teaching and Learning Method/s*** | ***Evaluation Method/s*** | ***Assessment Method/s*** |
| 1, 2, 4, 5, 8, 10, 11, 13 | Literature search | Discussion | Rubrics\* |
| 6, 7, 9, 12, 13 | Summary writing | Discussion, Report | Rubrics\* |
| 6, 7, 9, 12, 13 | Report Preparation | Discussion, Report | Rubrics\* |
| 2, 3, 9, 12 | Presentation | Discussion, Presentation | Rubrics\* |
| 2, 3, 10, 14, 15, 16 | Team work | Report, Presentation | Rubrics\* |

**\* a special rubric is available to assess each of mentioned evaluation method.****Teaching methods*** Lectures
* Discussions and brainstorming.
* Reflections.

**Course Material and Announcements**Course related announcements and assessment/evaluation (assignments & exams, if any) results will be posted on the personal website of the instructor and is responsibility of each student to check the site regularly. **Learning Skills:**1. Scientific writing
2. Presentation skills
3. Communication skills
4. Critical thinking
5. Scientific reasoning
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**23 Evaluation Methods:**

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| Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

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| **Evaluation Activity** | **Mark** | **Topic(s)** | **Period (Week)** | **Platform** |
| **Evaluation** | **10** | **Attendance**  | **All weeks** | **Microsoft teams** |
| **Literature Search (research paper & literature review)** | **20** | **Topic Selected\*** | **2 weeks****(4th- 5th Week)** | **Moodle****(E-learning)** |
| **Oral discussion (literature review)** | **10** | **Topic Selected\*** | **2 weeks** **(4th & 5th Weeks)** | **Moodle****(E-learning)** |
| **Summary writing@ (research paper)** | **10** | **Topic Selected\*** | **1 week** **(6th Week)** | **Moodle****(E-learning)** |
| **Report writing@ (research paper & literature review)** | **20** | **Topic Selected\*** | **1 week****(7th -8th Week)** | **Moodle****(E-learning)** |
| **Presentation (research paper & literature review)** | **30** | **Topic Selected\*** | **2 weeks** **(8th -10th Weeks)** | **Moodle****(E-learning)** |

\*Topic selected by the student from pharmaceutics related titles based on his/her preference and should be approved by course instructor or instructor provided list.@Scientific writing: Report and/or summary writing. |

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

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**25 Course Policies:**

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| A- Attendance policies:Attendance: Mandatory.NB. University regulations applied.B- Absences from exams and submitting assignments on time:Will result in zero achievement unless health report or other significant excuse is documented.C- Health and safety procedures:NAD- Honesty policy regarding cheating, plagiarism, misbehavior:The participation, and/or the commitment of cheating will lead to applying all following penalties together:1) Failing the module, he/she cheated at2) Failing the other modules taken in the same course3) Not allowed to register for the next semester (summer semester is not considered as a semester).

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| **Grading System/Scale** |
| **A:** | **90 - 100** |
| **A-:** | **85 - 89** |
| **B+:** | **80 - 84** |
| **B:** | **75 - 79** |
| **B-:** | **70 - 74** |
| **C+:** | **65 - 69** |
| **C:** | **60 – 64** |
| **C-:** | **56 – 59** |
| **D+:** | **53 – 55** |
| **D:** | **50 – 52** |
| **D-:** | **36 – 49** |
| **F:** | **0 – 35** |

NB. University regulations applied.E- Grading policy:

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| **Marks Distribution** |  |
|  **Evaluation** | **10 points** |  |
|  **Literature Search** | **20 points** |  |
|  **Oral discussion** | **10 points** |  |
|  **Summary Writing** | **10 points** |  |
|  **Report Writing** | **20 points** |  |
|  **Presentation** | **30 points** |  |
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F- Available university services that support achievement in the course: |

**26 References:**

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| A- Required book(s), assigned reading and audio-visuals:* Required book(s), assigned readings, and audio-visuals.
* Recommended books, materials, and media:
* Any reference book is accepted.
* Research and review articles are also used.

B- Recommended books, materials and media:Data show and internet connection. |

**27 Additional information:**

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| NA |

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| Name of Course Coordinator: **Dr Mais Saleh** | Signature: | Date: **October 12th, 2020** |
| Head of Curriculum Committee/Department: **NA** | Signature: |  |
| Head of Department: | Signature: |  |
| Head of Curriculum Committee/Faculty: | Signature: |  |
| Dean: | Signature: |  |

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***Seminar in Pharmaceutics and Pharmaceutical Technology***

***First Semester 2020-2021***

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| **Week Number** | **Lecture# *Meeting Date*** | **Aim/s** | **Teaching Material** | **Activity** | **Platform****[Approach]** | **Reference** |
| 1&2 | 11– 24/10/2020 | Introduction to seminar course. | Available Topics | Selection of a topic | **Moodle/E-learning [Forum]****MS Teams [Live]**  | SP-UJ seminar courses guidance.Lecture on MS Teams.Shared video on Moodle. |
| How to perform literature search/ UJ Library website tour | Selection of at least one review article and one research paper about the selected topic ([Topics List](file:///G%3A/USB%20DATA/JU%20FILES/JU%20Automn%202020-2021/Seminar/Seminar-Research_Project_._Topics.docx)) |
| What is/are the difference/s between a review article and research paper. |
| 3 | 25-31/10/2020 | Topic selection |  |  |  |  |
| 4 | 01– 14/11/2020 | Scientific writing: literature review writing and oral discussion. | How to write a mini literature review  | Writing a mini-literature of the selected papers. | **MS Teams [Live]****Moodle/E-learning [Assignment]** | Lecture on MS Teams.Shared material on directions and instruction of “How to write a mini review in a Journal Article” |
| 5 |
| 6 | 15 – 28/11/2020 | Scientific writing: research paper summery & Report writing. | 1.) How to write a summary of a selected research paper.2.) How to write a scientific Report | Writing a report based on (at least) on the selected research paper & review article | **MS Teams [Live]****Moodle/E-learning [Assignment]** | Shared material on directions and instruction of “How to Summarize a Journal Article”.Lecture on MS Teams.Shared material on directions and instruction of “How to write a scientific Report”Shared material on directions and instruction of “[Typing Instructions & Referencing](https://elearning.ju.edu.jo/mod/resource/view.php?id=81031)” |
| 7 | Typing and referencing directions. |
| 8 | 29/11 – 12/12/2020 | Presentation: Preparation and Doing | How to prepare a presentation | Preparing and doing a dynamic presentation using MS PowerPoint | **MS Teams [Live]****Moodle/E-learning [Assignment]** | Lecture on MS Teams.Shared material on directions and instruction of “How to do dynamic presentation” |
| 9 | How to do a dynamic presentation |
| How to use MS PowerPoint |
| 10 | Final Exam$ |  |  |  |  |  |
| # (which is equivalent to 1 meeting/lecture per week during fall and spring semesters or 2 meetings/lectures per week during summer semester) |
| $ Report & Presentation activities |
| SP-UJ: School of Pharmacy -The University of Jordan |
| MS: Microsoft |