



Jordan University of Science and Technology
Faculty of Pharmacy
Pharmacy Department

PHAR356 Drug Compounding Lab 2 - JNQF Level: 7

Second Semester 2023-2024

Course Catalog

1 Credit Hours. This course is designed to teach students how to prepare semisolid and solid formulations (creams, ointments, suppositories, tablets and capsules). In addition, pharmacy students will learn how to conduct preformulation studies and how to evaluate solid dosage forms.

Teaching Method: On Campus

Text Book

Title	Martin's Physical Pharmacy and Pharmaceutical Sciences
Author(s)	Patrick J. Sinko
Edition	6th Edition
Short Name	Ref # 1
Other Information	Lippincott Williams & Wilkins (Publisher)

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref # 2	Ansel's Pharmaceutical Dosage Forms and Drug Delivery Systems	Loyd V. Allen, Jr., Nicolas G. Popovich & Howard C. Ansel	10th Edition	Lippincott Williams & Wilkins (Publisher)

Instructor

Name	Mr. Samer Kharashqeh
Office Location	D2 level -2
Office Hours	
Email	skkharashqeh@just.edu.jo

Class Schedule & Room

Section 3:
Lecture Time: Thu : 10:30 - 12:30
Room: LAB

Section 4:
Lecture Time: Thu : 10:30 - 12:30
Room: LAB

Section 7:
Lecture Time: Thu : 14:30 - 16:30
Room: LAB

Section 8:
Lecture Time: Thu : 14:30 - 16:30
Room: LAB

Section 9:
Lecture Time: Thu : 12:30 - 14:30
Room: LAB

Prerequisites		
Line Number	Course Name	Prerequisite Type
303544	PHAR354 Pharmaceuticals 3	Pre./Con.

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Compounding a semisolid cream (O/W and W/O)	lab notes + From Ref # 2
Week 2	Semisolid incorporation techniques	lab notes + From Ref # 2
Week 3	Compounding suppositories	lab notes + From Ref # 2
Week 4	Determination of dissolution profile of solid dosage form	lab notes + From Ref # 1
Week 5	Kinetic degradation of indomethacin solution	lab notes + From Ref # 1
Week 6	Determination of particle size distribution and powder density	lab notes + From Ref # 1
Week 7	Compounding tablets (granulation and direct compression)	lab notes + From Ref # 2
Week 8	Evaluation of tablets part 1	lab notes + From Ref # 2
Week 9	Evaluation of tablets part 2	lab notes + From Ref # 2
Week 10	Compounding capsules	lab notes + From Ref # 2
Week 11	Compounding clindamycin topical solution	lab notes + From Ref # 2

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Demonstrate the ability to compound semisolid and solid dosage forms (creams, ointments, suppositories, tablets and capsules) [1PLO5.1] [1L7S2, 1L7S3]	45%	
Demonstrate the ability to conduct preformulation studies [1PLO1.1] [1L7K1, 1L7S3]	27%	
Prepare liquid preparation out of solid dosage form [1PLO5.1] [1L7S2, 1L7S3]	9%	
Evaluate pharmaceutical solid dosage forms [1PLO5.1] [1L7K1, 1L7S1]	19%	

Relationship to Program Student Outcomes (Out of 100%)															
PLO1.1	PLO2.1	PLO3.2	PLO3.3	PLO2.2	PLO2.3	PLO2.4	PLO3.1	PLO3.4	PLO3.5	PLO3.6	PLO4.1	PLO4.2	PLO4.3	PLO4.4	PLO5.1
27															73

Relationship to NQF Outcomes (Out of 100%)			
L7K1	L7S1	L7S2	L7S3
23	9.5	27	40.5

Evaluation	
Assessment Tool	Weight
Midterm exam	20%
Final exam (practical)	20%
Final exam (theoretical)	20%
Quizzes	10%
Product evaluation	10%
Reports and Assignments	15%
Personal evaluation	5%

Policy

Exams	All exams are closed books and notes. The final exam is comprehensive (covers all the material). The midterm incomplete exam needs approval from the departments? heads. The final incomplete exams need approval from the dean.
Cheating	Prohibited; The commitment of the acts of cheating and deceit such as copying during examinations, altering examinations for re-grade, plagiarism of homework assignments, and in any way representing the work of others as your own is dishonest and will not be tolerated. Standard JUST policy will be applied. المادة 7: إذا ضبط الطالب أثناء الامتحان أو الاختبار متلبساً بالعث فتوقع عليه العقوبات التالية مجتمعة: أ- اعتباره راسباً في ذلك الامتحان أو الاختبار. ب- الغاء تسجيله في بقية المساقات المسجل لها في ذلك الفصل. ج- فصله من الجامعة لمدة فصل دراسي واحد، و هو الفصل التالي للفصل الذي ضبط فيه.
Attendance	Attendance is mandatory and will be recorded regularly. Excellent attendance is expected. Students who miss more than 20% of the classes will be dropped from the course as per JUST policy. If you miss class, it is your responsibility to find out about any announcements or assignments you may have missed.
Active learning and students? participation	Students are expected to actively participate in class discussions.
Withdraw	Deadline for practical courses withdrawal (without reimbursement of tuition fees) is 24/5/2024

Date Printed: 2024-02-29