



Jordan University of Science and Technology
Faculty of Pharmacy
Doctor Of Pharmacy (Pharm D.) Department

PHMD357 Drug Compounding Lab
Second Semester 2023-2024

Course Catalog
1 Credit Hours. This course is designed to teach students how to prepare liquid, semisolid and solid formulations (solutions, suspensions, emulsions, creams, ointments, suppositories, tablets and capsules). In addition, students will learn how to conduct preformulation studies.
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 1:
Lecture Time: Sun : 11:30 - 14:30
Room: LAB

Section 2:
Lecture Time: Sun : 14:30 - 17:30
Room: LAB

Section 4:
Lecture Time: Mon : 11:30 - 14:30
Room: LAB

Section 5:
Lecture Time: Mon : 14:30 - 17:30
Room: LAB

Section 6:
Lecture Time: Tue : 08:30 - 11:30
Room: LAB

Section 7:
Lecture Time: Tue : 11:30 - 14:30
Room: LAB

Section 8:
Lecture Time: Tue : 14:30 - 17:30
Room: LAB

Section 12:
Lecture Time: Wed : 11:30 - 14:30
Room: LAB

Section 14:
Lecture Time: Wed : 14:30 - 17:30
Room: LAB

Prerequisites		
Line Number	Course Name	Prerequisite Type
313450	PHMD345 Pharmacy Practice Lab	Pre./Con.

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Dispensing guidelines and compounding oral rehydration solution (ORS)	lab notes + From Ref # 2
Week 2	Compounding ear, nasal and ophthalmic solution drops	lab notes + From Ref # 2
Week 3	Compounding oral solutions (elixir & linctus)	lab notes + From Ref # 2
Week 4	Compounding pharmaceutical suspensions	lab notes + From Ref # 1
Week 5	Compounding pharmaceutical emulsions	lab notes + From Ref # 1
Week 6	Compounding semisolid creams (O/W and W/O)	lab notes + From Ref # 2
Week 7	Semisolid incorporation techniques + Pharmaceutical calculations	lab notes + From Ref # 2
Week 8	Compounding suppositories	lab notes + From Ref # 2
Week 9	Solubility enhancement techniques + Determination of dissolution profile of solid dosage form	lab notes + From Ref # 1
Week 10	Compounding tablets (granulation and direct compression)	lab notes + From Ref # 2
Week 11	Filling capsules and compounding clindamycin topical solution	lab notes + From Ref # 2

Mapping of Course Outcomes to Program Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Demonstrate the ability to compound liquid, semisolid and solid dosage forms (solutions, suspensions, emulsions, creams, ointments, suppositories, tablets and capsules) [1PLO5.1]	70%	

Demonstrate the ability to conduct preformulation studies. [1PLO1.1]	10%	
Demonstrate the ability to perform pharmaceutical calculations such concentration and activity expressions. [1PLO1.1]	20%	

Relationship to Program Student Outcomes (Out of 100%)															
PLO1.1	PLO2.1	PLO2.2	PLO2.3	PLO2.4	PLO3.1	PLO3.2	PLO3.3	PLO3.4	PLO3.5	PLO3.6	PLO4.1	PLO4.2	PLO4.3	PLO4.4	PLO5.1
30															70

Evaluation	
Assessment Tool	Weight
Midterm exam	20%
Final exam	40%
Quizzes	10%
Product evaluation	15%
Reports and Assignments	10%
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' head. The final incomplete exam needs 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 بالغش فتوقع عليه العقوبات التالية مجتمعة: أ- اعتباره راسياً 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 the lab.
Withdraw	The last day of practical courses withdrawal (without reimbursement of tuition fees) is May, 24th, 2024

Date Printed: 2024-03-02