# Al-Zaytoonah University of Jordan





Course Detailed Description – Procedures of the Course Plan Committee /Faculty of Pharmacy QF02/0408-1.0

Department Pharmacy		
	Department	Pharmacy

Course Name	Pharmaceutics-3	Course No.	0201321
Prerequisite	Pharmaceutics-2-	Credit Hours	2
Number & date of		Brief Description	See form
course plan approval		Biter Description	QF02/0409

	1. This course provides the students with broad knowledge on the different		
Intended Learning Outcomes	dosage forms with respect to their formulation techniques, uses, differentiation from other dosage forms, storage and dispensing instructions.  2. The information that the students will acquire from this course together with the practical section will enable them to compound extemporaneous preparations and will make them ready to study advanced courses in this field such as the industrial pharmacy courses.		
Course Topics	<ol> <li>This course teaches the definitions of different dosage forms, including; semisolids, suppositories and sterile preparations with respect to their characteristics, methods of preparation, uses and advantages over other dosage forms.</li> <li>The course also provides information on the ingredients and raw materials that are involved in the specific dosage forms and the scientific knowledge on different methods and techniques employed in the preparation of these dosage forms.</li> </ol>		
Text Books	<ol> <li>Pharmaceutics; The Design and Manufacture of Medicines, by:- M. E. Aulton. third edition, 2007</li> <li>Ansel's pharmaceutical dosage forms and drug delivery systems. 9<sup>th</sup> ed, 2011</li> <li>Pharmaceutical practice, A.J. Winfield, R.M.E Richard, 4<sup>th</sup> edition, 2009</li> </ol>		
References	<ol> <li>British Pharmacopeia, 2010.</li> <li>Remington's:- The science and practice of Pharmacy, 21<sup>st</sup> ed, 2006.</li> <li>Martindal Extra Pharmacopeia, 2009.</li> </ol>		
Grade Determination	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		

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## **Course Outline**

Week	Hours	Subjects	Chapters in Textbook	Notes
1	1 1	Semisolid dosage forms :- Introduction, Definitions and Classes		
2	1 1	Ointments: Bases, Classifications, Properties and Examples		
3	1 1	Percutaneous absorption: Routes of penetration, Factors affecting skin penetration, Percutaneous absorption techniques (in-vivo and in-vitro), formulation, dilution, evaluation tests, methods of preparation and packaging.		
4	1 1	Percutaneous absorption: Routes of penetration, Factors affecting skin penetration, Percutaneous absorption techniques (in-vivo and in-vitro), formulation, dilution, evaluation tests, methods of preparation and packaging. (continued)		
5	1 1	Creams, Pastes, Gels and examples of transdermal delivery system		
6	1 1	Creams, Pastes, Gels and examples of transdermal delivery system (continued)		
7	1 1	Suppositories: Definitions, Types, Reasons for suppository administration		
8	1 1	Factors affecting drug absorption from the rectum, Properties of ideal suppository bases and Types of suppository bases		
9	1 1	Methods of preparation of suppositories, Determination of displacement value, formulation parameters, quality control of suppositories, packaging and storage, rectal formulations other than suppositories, vaginal drug delivery.		
10	1 1	Ophthalmic preparations: Classification, Formulation and Requiremints		
11	1 1	Ophthalmic preparations: Classification, Formulation and Requiremints. (continued)		
12	1 1	Preparation of eye drops, containers for eye drops, formulations of eye lotions, formulation of eye ointments and containers, ophthalmic		

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		inserts, contact lenses.	
13	1	Parenteral preparation :- Advantages , Routes	
	1	of administration	
1 Formulations , Requirements of parenteral			
14	1	solutions	
1.5	1	Pyrogens: Definition, Characters, sources,	
15	1	Removal and pyrogen test	
16	1	Special injections, large volume parenteral	
	1	products.	

Approved by Dept. Chair	Date of Approval	

# Extra Information: (Updated every semester and filled by course instructor)

Course Instructor	Dr. Reema Abu Khalaf
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Office hours	10-11 Sun., Tue., Thu., 11-1 Mon., Wed.