

Course Detailed Description – Procedures of the Course Plan Committee /Faculty of Pharmacy	QF02/0408–2.10E
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Department	Pharmacy
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Course Name	Pharmaceutics-3-	Course No.	0201321
Prerequisite	Pharmaceutics-2-	Credit Hours	
Number & date of course plan approval		Brief Description	See form QF02/0409

Course Objectives	<ol style="list-style-type: none"> 1. Describe the development and purpose of the United States Pharmacopeia (USP) and the National Formulary (NF) 2. Describe the central features of a typical drug monograph 3. Compare and contrast significant drug regulation and control federal laws and their impact on pharmacy 4. Explain the concept of pharmaceutical care 5. Summarize the Code of Ethics for Pharmacists of the American Pharmacists Association 6. Summarize the Code of Ethics of the American Association of Pharmaceutical Scientists (AAPS)
Intended Learning Outcomes	<ol style="list-style-type: none"> 1. The student is able to understand the basics in formulating different conventional and unconventional dosage forms regarding formulation techniques, uses, storage and dispensing instructions. 2. The students will acquire from the basics of compounding extemporaneous preparations and will make them ready to study advanced courses in this field such as the industrial pharmacy courses. 3. The students will be able to critically think and appreciate the need of designing innovative dosage form that corresponds to the new challenges.
Course Topics	<ol style="list-style-type: none"> 1. 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. 2. 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.
Text Books	<ol style="list-style-type: none"> 1. Ansel's pharmaceutical dosage forms and drug delivery systems. 10th ed, 2014 2. Pharmaceutical practice, A.J. Winfield, R.M.E Richard , 4th edition, 2009

References	<ol style="list-style-type: none"> 1. Pharmaceutics. The Design and Manufacture of Medicines, by: M. E. Aulton. third edition , 2007 2. British Pharmacopeia, 2010. 3. Remington's:- The science and practice of Pharmacy, 21st ed, 2006. <p>Martindal Extra Pharmacopeia, 2009.</p>			
Grade Determination	1 st Exam = 25% 2 nd Exam = 25% Final Exam = 50%	Practical Course Grade Determination	Course Work = 50% (Reports, Term Papers, Quizes) Final Exam = 50%	
Course Outline				
Week	Hours	Subjects	Chapters in Textbook	Notes
1	1 1	Semisolid dosage forms : Introduction, Definitions and Classes	10 Ansel's	
2	1 1	Ointments: Bases, Classifications, Properties and Examples	10 Ansel's	
3	1 1	Creams, Pastes, Gels and examples of transdermal delivery system	10 Ansel's	
4	1 1	Creams, Pastes, Gels and examples of transdermal delivery system (continued)	10 Ansel's	
5	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.	11 Ansel's	
6	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)	11 Ansel's	
7	1 1	Suppositories: Definitions, Types, Reasons for suppository administration	12 Ansel's	
8	1 1	Factors affecting drug absorption from the rectum, Properties of ideal suppository bases and Types of suppository bases	12 Ansel's	
9	1 1	Methods of preparation of suppositories, Determination of displacement value,	12 Ansel's	

		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 Requirements	41 Aulton	
11	1 1	Ophthalmic preparations: Classification, Formulation and Requirements. (continued)	41 Aulton	
12	1 1	Preparation of eye drops, containers for eye drops, formulations of eye lotions, formulation of eye ointments and containers, ophthalmic inserts, contact lenses.	41 Aulton	
13	1 1	Parenteral preparation :- Advantages , Routes of administration	15 Ansel's	
14	1 1	Formulations, Requirements of parenteral solutions, Special injections, large volume parenteral products.	16 Ansel's	
15	1 1	Pyrogens: Definition, Characters, sources, Removal and Pyrogens test	16 Ansel's	
16	1 1	Pharmaceutical gels	39 Aulton 16 Ansel's	

Approved by Dept. Chair		Date of Approval	
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Extra Information: (Updated every semester and filled by course instructor)

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Office hours	