University of Al-Anbar
College of Pharmacy
Department of Pharmaceutics
Title of the course: ***Industrial Pharmacy* II** Course number: **512**
Level: 5th Class, 1st Semester
Credit hours: **Theory 3 hours** **Laboratory 1 hour**
Tutors:
Reference text: ***The Theory and Practice of Industrial Pharmacy by Leon Lachman et al; Latest edition.***

Objectives: The coarse enable technical setup for coordination of standards for formulation of typical dosage forms and the principles needed to learn mass production of different pharmaceutical dosage forms. The syllabus includes different dosage forms like tablets, capsules, aerosols, emulsion, etc, besides the advanced techniques like enteric coating and micro-encapsulation.

No	Lecture title	hours
1.	Pharmaceutical dosage forms: Tablets; role in therapy; advantages and disadvantages; formulation; properties; evaluation; machines used in tableting; quality control; problems; granulation, and methods of production; excipients, and types of tablets.	10
2.	Tablet coating; principles; properties; equipments; processing; types of coating (sugar and film); quality control, and problems.	4
3.	Capsules: Hard gelatin capsules; materials; production; filling equipments; formulation; special techniques.	3
4.	Soft gelatin capsules: Manufacturing methods; nature of capsule shell and content; processing and control; stability.	2
5.	Micro-encapsulation; core and coating materials; stability; equipments and methodology.	2
6.	Modified (sustained release) dosage forms; theory and concepts; evaluation and testing; formulation.	3
7.	Liquids: Formulation; stability and equipments.	3
8.	Suspensions: Theory; formulation and evaluation.	3
9.	Emulsions: Theory and application; types; formulation; equipments and quality control.	3
10.	Semisolids: Percutaneouse absorption; formulation; types of bases (vehicles) preservation; processing and evaluation.	3
11.	Suppositories: Rectal absorption; uses of suppositories; types of bases; manufacturing processes; problems and evaluation.	3
12.	Pharmaceutical aerosols: Propellants; containers; formulation; types and selection of components; stability; manufacturing; quality control and testing.	6