



Module Description

University of AL-Kafeel / College..... Academic Year (2020-2021)

Stage:	Third stage
Specialization:	Pharmacy
Name of the Course in Arabic	الصيدلة التكنولوجية 1
Name of the Course in English	Pharmaceutical Technology 1
Goals:	To teach theoretical bases for the technology of preparing different dosage forms with respect to their raw materials, compositions, methods of preparation, stability, storage and uses .
Description	This subjected is directly connected to the dispersed systems: their classification; comparisons between different systems. Solutions and types of solutions. Solubility: Factors affecting solubility; expression of dissolution; dissolution rate versus solubility; preparation of solutions containing non-volatile materials. Official solutions; classification of official solutions; preparation and uses. Aqueous solutions containing aromatic principles; aromatic waters; methods of preparations; stability. Also, Syrups: sugar-based syrups; artificial and sorbitol-based syrups; stability of syrups. Also, Definition and methods of clarification; filter aids in clarification. Preparation of solutions using mixed solvent systems; spirits, and elixirs. Extraction; maceration and percolation. Tinctures; fluid extracts; extracts of resins and oleoresins. Colloidal dispersions; .lyophilic; lyophobic. Coarse dispersion; suspensions .

Number of Theoretical lectures	Theory 3
Number of Practical lectures	Laboratory 2
Credits	4
Name of Instructor in Arabic	سرمد صباح ناصر (نظري) , قاسم علاوي بدر جابر (عملي)
Name of Instructor in English	,Sarmad Sabah Nasser Qasim Allawi Bader Jaber
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Curriculum / Theoretical:

Week	Syllabus
1	Dispersed systems: their classification; comparisons between different systems.
2	Solutions and types of solutions.
3	Solubility: Factors affecting solubility; expression of dissolution; dissolution rate versus solubility; preparation of solutions containing non-volatile materials.
4	Official solutions; classification of official solutions; preparation and uses.
5	Aqueous solutions containing aromatic principles; aromatic waters; methods of preparations; stability.
6	Syrups: sugar based syrups; artificial and sorbitol based syrups; stability of syrups.
7	Definition and methods of clarification; filter aids in clarification.
8	Preparation of solutions using mixed solvent systems; spirits, and elixirs.
9	Extraction; maceration and percolation.
10	Tinctures; fluid extracts; extracts of resins and oleoresins.
11	Colloidal dispersions; lyophilic; lyophobic.
12	Coarse dispersion; suspensions.

Curriculum / Practical:

Week	Syllabus
1	Solutions (Into body cavity, oral and external use).
2	Syrups: Preparation techniques and quality evaluation.
3	Review and tutorial
4	Elixirs: Preparation techniques and quality evaluation.
5	Spirits: Preparation techniques and quality evaluation.
6	Review and tutorial
7	Suspensions: Preparation techniques and quality evaluation.
8	Dispersion of oils in inhalations.

References :

Main References :

- [1] Pharmaceutical Dosage forms and Drug Delivery Systems By Haward A. Ansel; latest edition.
- [2] Sprowel's American Pharmacy; Latest edition .
- [3] Lab Manual for Practical Pharmaceutical technology Adopted by the Department.

Secondary References:

- [1] Aulton's Pharmaceutics The Design and Manufacture of Medicines By Michael E. Aulton and Kevin M. G. Taylor
- [2] Physical Pharmacy by Alfred Martin et al; (Latest edition).