



Paramedical program	
Specialization	Pharmacy
Course number	020805132
Course title	Pharmaceutics 1/ practical
Credit hours	2
Theoretical hours	0
Practical hours	6



Brief Course Description:

It is a practical course includes drug prescription and its contents, calculations, pharmaceutical measurements, weighing and measuring volumes.

Course Objectives:

Upon the completion of the course, the student will be able to:

1. use and handle tools and lab instruments
2. Identify pharmacopoeias and how to use.
3. Know the components of prescriptions.
4. calculate the amount of the prescription components.
5. Identify different pharmaceuticals calculations and performed them correctly.

Detailed Course Description:

Unit number	Unit name	Unit content	Time needed
1.		<ul style="list-style-type: none"> ▪ Identification of tools , instruments available in the lab ▪ Training on using measuring tools for (weight & volume) ▪ Laboratory Rules and Safety ▪ hazard symbols should be used as guides for the handling of chemical reagents 	
2.	Pharmacopoeia and other compendia	<ul style="list-style-type: none"> ▪ Pharmacopoeias contents and how to use. <ul style="list-style-type: none"> ○ British pharmacopoeia (B. P.) ○ State pharmacopoeia (U.S.A) ▪ Martindale ▪ MIMs ▪ Jordan drug index 	
3.	Dispensing and Prescription.	<ul style="list-style-type: none"> ▪ summarize pharmaceutical/medical terminology, abbreviations and symbols commonly used in the prescribing, dispensing, and charting of medications in the pharmacy ▪ Analysis of prescription ▪ report error , missing part in the prescription and prescription of patient medication record . ▪ Pharmacist counseling (OTC, Cosmetics, Inhaler) 	
4.	Posology	<ul style="list-style-type: none"> ▪ factors affecting dose ▪ calculation of doses for infants and children. 	
5.	Pharmaceutical calculations:	<ul style="list-style-type: none"> ▪ Pharmaceutical measurement systems:(metric, avoirdupois, and apothecary) ▪ ratio and proportion, dosage determinations, percentage ▪ preparations, reducing and enlarging formulas ▪ dilution and concentration.(dilution from stock 	



		<p>solution, dilution from two solution without using diluents(solvents)</p> <ul style="list-style-type: none"> ▪ Mole fraction , Molarity ,And Normality ▪ Molar ratio: (between weak acid and it's salt, between weak base and it's salt.`` 	
6.	Preparation of dilute solutions using stock or concentrated solutions	<ul style="list-style-type: none"> • Preparation of dilute alcohol solution using concentrated alcohol solution • Preparation of alcohol solution by using two alcohol solutions without using water 	

Evaluation Strategies:

	Exams	Percentage	Date
	Mid Exam	25%	--/--/----
	Final Exam	50%	--/--/----
	Technique	10%	
	Homework and Projects Discussions and lecture Presentations	15%	--/--/----

Teaching language:

- English

Teaching Methodology:

- Laboratory



Text Books & References:

- 1- Pharmaceutical practice , A.J. Winfield, R.M.E. Richards, 3d. edition, 2005, Churchill Livingstone
- 2- Remington ,The science and practice of pharmacy 21st edition,2004, Lippincott William & Wilkens
- 3- British Pharmacopoeia 2008, British pharmacopoeia Commission, TSO.
- 4- The Science of dosage form design, Edin burgh, 2002, New Yourk, Churchill Livingston