



<b>Paramedical program</b>	
<b>Specialization</b>	<b>Pharmacy</b>
<b>Course number</b>	<b>020805232</b>
<b>Course title</b>	<b>Pharmaceutics 2/ practical</b>
<b>Credit hours</b>	<b>2</b>
<b>Theoretical hours</b>	<b>0</b>
<b>Practical hours</b>	<b>6</b>



**Brief Course Description:**

It is a practical course includes preparation of liquid dosage forms ( solutions, syrups, spirits, tinctures ) emulsions, eye drops, ear drop and lotions.

**Course Objectives:**

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

3. prepare a different liquid dosage forms
4. identify these dosage forms ( properties, methods of preparation )
2. Prepare emulsion by using dry method
3. prepare emulsion by using wet method
4. prepare emulsion by using forbs' method
5. Calculate the amount of acacia as an emulsifying agent
6. use additives in a right way
7. understand the aim of adding each of substance to the preparation
9. Know the indications and uses of each preparation
10. understand principles and labeling of preparations.

**Detailed Course Description:**

Unit number	Unit name	Unit content	Time needed
1.	<b>Preparation of solutions</b>	<ul style="list-style-type: none"> <li>▪ Simple solution ( potassium permanganate solution )</li> <li>▪ Using co-solvents : ( Gentian violet solution )</li> <li>▪ Solutions prepared by complex formation ( weak iodine ,strong iodine solution)</li> </ul>	
2.	<b>Preparation of Intravenous solutions</b>	<ul style="list-style-type: none"> <li>▪ Normal saline solution</li> <li>▪ Glucose water solution.</li> </ul>	
3.	<b>Tinctures</b>	<ul style="list-style-type: none"> <li>▪ Iodine tincture</li> </ul>	
4.	<b>Aromatic waters and Spirits</b>	<ul style="list-style-type: none"> <li>▪ Chloroform water /or peppermint water</li> <li>▪ Peppermint spirit</li> </ul>	
5.	<b>syrops</b>	<ul style="list-style-type: none"> <li>▪ Simple syrup</li> </ul>	
6.	<b>Drops</b>	<ul style="list-style-type: none"> <li>▪ Salicylic acid ear drop</li> <li>▪ zinc sulfate eye drops</li> </ul>	
7.	<b>Suspension</b>	<ul style="list-style-type: none"> <li>-preparation of calamine lotion</li> <li>- preparation of oily calamine lotion</li> <li>- dispense and prepare anti biotic suspension</li> </ul>	
8.	<b>Emulsion</b>	<ul style="list-style-type: none"> <li>-Castor oil emulsion</li> <li>-Paraffin oil emulsion</li> <li>-Peppermint oil emulsion</li> </ul>	



## 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 21<sup>st</sup> 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

**Al-Balqa' Applied University**



**جامعة البلقاء التطبيقية**

تأسست عام 1997

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