



<b>Paramedical program</b>	
<b>Specialization</b>	<b>Pharmacy</b>
<b>Course number</b>	<b>020805234</b>
<b>Course title</b>	<b>Pharmaceutics 3/ 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 preparing semi solid dosage forms such as liniments , pasts, ointments , creams, suppositories, and solid dosage forms such as dusting powders, effervescent powder, granules, and lozenges.

### **Course Objectives:**

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

1. Identify semi-solid pharmaceutical dosage forms ( types, properties, method of preparation )
2. prepare these dosage form in different known method
3. know the purpose of each additive ( content ) of the formula
4. know the uses of the formula
5. know the type of bases used in suppositories, ointments and creams
6. package and label the dosage form in a suitable container and use a suitable label

**Detailed Course Description:**

Unit number	Unit name	Unit content	Time needed
1.	<b>Suppositories</b>	<ul style="list-style-type: none"> <li>▪ Glycerin suppositories</li> </ul>	
2.	<b>Pastes</b>	<ul style="list-style-type: none"> <li>▪ zinc oxide paste</li> </ul>	
3.	<b>Ointments</b>	<ul style="list-style-type: none"> <li>▪ Zinc oxide ointment (Trituration using mortar and pestle)</li> <li>▪ Whitfield ointment (trituration using slid and spatula)</li> <li>▪ Simple ointment (fusion method)</li> </ul>	
4.	<b>Creams</b>	<ul style="list-style-type: none"> <li>• Cream preparation ( cold cream )</li> <li>• Creams (vanishing cream)</li> </ul>	
5.	<b>Powder and Granules</b>	<ul style="list-style-type: none"> <li>▪ Preparation of dusting powder</li> <li>▪ Preparation of effervescent powders (electrolyte mixture)</li> <li>▪ Preparation granules of ( Acetyl salicylic acid )</li> </ul>	
6.	<b>Lozenges</b>	<ul style="list-style-type: none"> <li>▪ Preparation of gelatin lozenges</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