COURSE DESCRIPTIONS

Faculty	Pharmacy				
Department	Pharmaceutical sciences			**NQF level**	
Course Title	Pharmaceutical Formulations Laboratory	**Code**	**PHC 449**	**Prerequisite**	**PHC 443 or Synchronizing**
Credit Hours	1	**Theory**	---	**Practical**	1
Course Leader	**A.R.Gardouh, PhD.**	**email**	Ahmed.ga@jadara.edu.jo		
Lecturers	**A.R.Gardouh, PhD.**	**emails**	Ahmed.ga@jadara.edu.jo		
Lecture time		**Classroom**			
Semester		**Production**	2020	**Updated**	2020
Awards				**Attendance**	Fulltime

Short Description

To carry out, interpret and formulate different liquid prescription types. students will be able to differentiate between pharmaceutical semisolid dosage forms. Teaches different types of solid dosage forms, including powders , granules , tablets and capsules. Aims to focus on differentiation between dosage forms with respect to their characteristics, methods of preparation, ingredients, uses and advantages over other dosage forms. Provides knowledge on the ingredients and raw materials that are involved in the specific dosage forms. Provides scientific knowledge on different methods and techniques employed in the preparation of these dosage forms

Course Objectives

1. interpret and formulate different liquid prescription types
2. focus on differentiation between dosage forms with respect to their characteristics Acquiring knowledge regarding solid dosage forms such as Tablets capsules , powders and granules.
3. Acquiring the knowledge regarding preparation of the pharmaceutical products .
4. Acquire knowledge regarding labelling, patient advice and counselling

Learning Outcomes

A. Knowledge - Theoretical Understanding

a1. Outline different types of dosage forms and prescriptions.
a2. Discuss procedures of preparations.

B. Knowledge - Practical Application

A3. Practice different types of liquid dosage forms preparation and Explain prescriptions having certain difficulties or incompatibilities. .

C. Skills – Generic Problem Solving and Analytical Skills

B1. Identify categories of dosage forms.

D. Skills – Communication, ICT, and Numeracy

B2. Prepare various solid dosage forms, powders and granules and Specify the proper ware and environment for preparations.

E. Competence: Autonomy, Responsibility, and Context

c1. Retrieve and evaluate information from different sources.

Teaching and Learning Methods

laboratories will be given according to the specified time and location as assigned on the academic schedule (see course information above) followed by practice
laboratories will be administrated using power-point presentations and will be provided to the students through e-learning website.
Textbook is obligatory and required by the students.

Teaching duration:
According to the academic calendar provided at JU website.

Assessment Methods

- First Exam (10%)
- Second Exam (10%)
- Lab tests reports and assignments (30%)
- Final Exam (50%)

Course Contents					
Week	**Hours**	**CLOs**	**Topics**	**Teaching & Learning Methods**	**Assessment Methods**
1.	1	A1,b1 ,c1	• introduction to prescription • reading prescription	Power point presentation & practice	& lab assignment
2.	1	A1,b1 , c1	**Cough syrup , iron mixture**	Power point presentation & practice	& lab assignment
3.	1	A1, b1, c1	**suspensions**	Power point presentation & practice	& lab assignment

4.	1	A2,b2	**emulsions**	Power point presentation & practice	& lab assignment
5.	1	A2,b2	**ointments**	Power point presentation & practice	& lab assignment
6.	1	A3,b2	**creams**	Power point presentation & practice	& lab assignment
7.	1	A3, b2	• suppositories • Glycerol gelatin suppositories	Power point presentation & practice	& lab assignment
8.	1	A3,b2	• **soap glycerin**	Power point presentation & practice	& lab assignment
9.	1	A3, b2, c1	**powders and granules**	Power point presentation & practice	& lab assignment
10.	1	A3,b2 ,c1	• **micromeritics**	Power point presentation & practice	& lab assignment
11.	1	A3, b2, c1	• **effervescent granules**	Power point presentation & practice	& lab assignment
12.	1	A3, b2, c1	• **quality control of effervescent granules**	Power point presentation & practice	& lab assignment
13.	1	A3, b2, c1	• **capsules**	Power point presentation & practice	& lab assignment
14.	1	A3, b2, c1	• **quality control tests of capsules**	Power point presentation & practice	& lab assignment
15.	1	A3, b2, c1	• **tablets**	Power point presentation & practice	& lab assignment

Infrastructure	
Textbook	pharmaceutical compounding
References	• https://evolve.elsevier.com

	• Lecture handouts • NCBI Database (https//:www.ncbi.nlm.nih.gov/): includes many textbooks that are available online FREE.
Required reading	Textbook is obligatory and required by the students
Electronic materials	Provided to the students through JU e-learning website.
Other	In addition to the above, the students will be provided with handouts by the lecturer.

Course Assessment Plan								
Assessment Method		**Grade**	**CLOs**					
			A1	**A2**	**A3**	**B1**	**B2**	**C1**
First (Midterm)		30	10	5		10		5
Second (if applicable)								
Final Exam		50	5	10	10	5	10	10
Coursework								
Coursework assessment methods	Assignments							
	Case study							
	Discussion and interaction							
	Group work activities							
	Lab tests and assignments							
	Presentations	20			5		5	10
	Quizzes							
Total		100	15	15	15	15	15	25

Plagiarism
Plagiarism is claiming that someone else's work is your own. The department has a strict policy regarding plagiarism and, if plagiarism is indeed discovered, this policy will be applied. Note that punishments apply also to anyone assisting another to commit plagiarism (for example by knowingly allowing someone to copy your code). Plagiarism is different from group work in which a number of individuals share ideas on how to carry out the coursework. You are strongly encouraged to work in small groups, and you will certainly not be penalized for doing so. This means that you may work together on the program. What is important is that you have a full understanding of all aspects of the completed program. In order to allow proper assessment that this is indeed the case, you must adhere strictly to the course work requirements as outlined above and detailed in the coursework problem description. These requirements are in place to encourage individual understanding, facilitate individual assessment, and deter plagiarism.