

COURSE DESCRIPTIONS

Faculty	Pharmacy				
Department	Pharmacy			NQF level	
Course Title	Calculations & Compounding of Dosage Forms.	Code	PHC 447	Prerequisite	PHC 443
Credit Hours	2	Theory	2	Practical	-
Course Leader	Assoc.Professor. Dr. Ahmed Rifaat	email	Ahmed.ga@jadara.edu.jo		
Lecturers	Assoc.Professor. Dr. Ahmed Rifaat	emails	Ahmed.ga@jadara.edu.jo		
Lecture time		Classroom			
Semester		Production		Updated	
Awards				Attendance	Fulltime

Short Description

- This course teaches pharmaceutical calculations that are involved in prescriptions

Course Objectives

- Starting with international systems of units, roman numerals and Latin abbreviations.
- Calculations involved in dilution, concentration, reducing and enlarging formulas
- Dosage Calculations
- Calculate concentrations of mixtures

Learning Outcomes

A. Knowledge - Theoretical Understanding

a1. Perform conversions of measurement within the metric system and between the metric, household and apothecary systems.

B. Knowledge - Practical Application

A2. Solve problems involving the following: ratio & proportion, fractions and conversion of ratios to percentages

C. Skills - Generic Problem Solving and Analytical Skills

B1. Perform dosage calculations including the following: calculating number of doses, dispensing quantities, ingredient quantities, paediatric formulas body surface area and day supply calculations.

B2. Understanding calculations regarding (weight/weight, weight/volume, volume/weight and volume/volume) and dilutions of stock solutions

D. Skills - Communication, ICT, and Numeracy

B3. To use computer and internet to extract information and knowledge

E. Competence: Autonomy, Responsibility, and Context
C1. use information technology tools .
Teaching and Learning Methods
<ul style="list-style-type: none"> • Lectures. • Research projects and information collection. • discussion during lectures and tutorial • self-learning (presenting scientific proposal)
Assessment Methods
(presentations, research, quizzes) Final exam

Course Contents					
Week	Hours	CLOs	Topics	Teaching & Learning Methods	Assessment Methods
.1	2	A1, b1	Roman Numerals	Lectures, Research projects and information collection. discussion during lectures and tutorial self-learning (presenting scientific proposal)	Assignments , Mid and final exams
.2	2	A1, b1	International Systems of Units; Metric system	Lectures, Research projects and information collection.	Assignments , Mid and final exams
.3	2	A1, b2	common systems	discussion during lectures and tutorial self-learning (presenting scientific proposal)	Assignments , Mid and final exams
.4	2	A1, b2	conversion	Lectures, Research projects and information collection.	Assignments , Mid and final exams
.5	2	A2, b3	Calculation of doses	discussion during lectures and tutorial self-learning (presenting scientific proposal)	Assignments , Mid and final exams
.6	2	A2, c1	Reducing and enlarging formulas	Lectures, Research projects and information collection.	Assignments , Mid and final exams
.7	2	A2,B3	Weight and volume of materials	discussion during lectures and tutorial self-learning (presenting scientific proposal)	Assignments , Mid and final exams
.8	2	A1, b2	Percentage, Ratio Strength Other Expressions of Concentration.	Lectures, Research projects and information collection.	Assignments , Mid and final exams
.9	2	A2, b1, c1	Dilutions and concentration	discussion during lectures and tutorial self-learning (presenting scientific proposal)	Assignments , Mid and final exams
.10	2	A2, b3	Dilutions and concentration	Lectures, Research projects and information collection.	Assignments , Mid and final exams
.11	2	A2, b3, c1	Allegation	discussion during lectures and tutorial self-learning (presenting scientific proposal)	Assignments , Mid and final exams

Infrastructure	
Textbook	-Pharmaceutical calculations, by: M. J. Stocklosa and H. C. Ansel, 13th edition,2010
References	a) .British Pharmacopeia, 2010. b) Remington's:- The science and practice of Pharmacy, 21st ed, 2006. c) . Martindale Extra Pharmacopeia, 2009..
Required reading	

Electronic materials	lectures
Other	

Course Assessment Plan								
Assessment Method		Grade	CLOs					
			A1	A2	B1	B2	B3	C1
First (Midterm)		20	10		10			
Second (if applicable)								
Final Exam		50	5	10	5	10	10	10
Coursework								
Coursework assessment methods	Assignments	10	2	2	2	2	1	1
	Case study							
	Discussion and interaction							
	Group work activities							
	Lab tests and assignments							
	Presentations							
	Quizzes	20	5	5	5	5		
Total		100	22	17	22	17	11	11

Plagiarism
<p>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).</p> <p>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.</p>