

Pharmaceutical Calculations
University of Baghdad
College of Pharmacy
First Level
2nd semester **2021-2022**



Credit Hours: Lecture 2.0

Lab 1.0

Instructors: Asst. Prof Fatima Jalal (PhD), drfatimajalal@copharm.uobaghdad.edu.iq
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Students are encouraged to reach out to course instructors to seek help with class materials or inquire about other issues related to this course. Students can contact instructors using email addresses provided above or visit instructors on campus.

Class Meeting Time:

Monday **A:** 9:30 – 10:30 PM, **B:** 11:30 – 12:30 AM

Wednesday **A:** 10:30 – 11:30 PM, **B:** 8:30 – 9:30 AM

Please refer to course timetable for any updates on class meeting time.

Brief Course Description:

This course aims at introducing students to computations employed in pharmacy practice. It involves computation of pharmaceutical ingredients, dosage forms, pharmaceutical formulations of extemporaneous compounding, and biological parameters of drug substances.

Learning Objectives:

In this course the students learn calculations for dilution and concentration of different types of liquids and calculations involved in preparing isotonic solutions, electrolyte solutions and intravenous admixtures.

Class Notes and Materials:

1. Google classroom will be used as the electronic course management tool in this course. Students should login to the course site on Google classroom for lecture materials and assignments. Students will need to use their university email (name@copharm.uobaghdad.edu.iq) to log in to class website.
2. Class materials will be provided in the format of pdf handouts summarizing important lecture content.
3. Students are expected to participate in the classroom. Participation will count toward course grades.
4. Students should expect pop quizzes any time during the course
5. There will be assignments posted on Google classroom and students are expected to turn in their work on the classroom on time. These assignments should help students understand and practice important concepts and skills covered in this course. Students will be allowed sufficient time to submit their assignments. Late assignments will be accepted.

Reference Textbook:

The following textbook will be used for this course:

Pharmaceutical Calculations, Howard C. Ansel, 13th Edition.

An electronic copy of the textbook will be available on the course google classroom.

Course Topics:

Below is a summary of tentative topics to be covered in this course

| Chapter | Title | Page number |
|----------------|--|--------------------|
| Chapter 8 | Calculation of Doses: Patient parameters | 121 |
| Chapter 11 | Isotonic and Buffer Solutions | 167 |
| Chapter 12 | Electrolyte Solutions: Milliequivalent, Millimoles, and Milliosmoles | 187 |
| Chapter 15 | Altering Product Strength, Use of Stock Solution, and Problem Solving Using Alligation | 251 |

Grading:

Grading system for this course is as follows

| | |
|-------------------------|-----|
| Midterm exam | 20% |
| Assignments and quizzes | 5% |
| Lab work | 25% |
| Final exam | 50% |

Electronic Classroom Expectations:

The course website will be the main way of delivering course content and communication between students and instructors. Students should have their names displayed in Arabic and have a profile picture added to their profile

Students are welcomed to ask questions by commenting on class material posted. Students can ask questions using the private comment feature where only instructors will be able to see the comments. This feature is available on all assignment posts and not on materials.

Please allow some time for instructors to see your comment or email and respond to it before you resend them