

Pharmaceutical calculation

PHT 210

Objectives:

1. Provides a pharmacy student a basic underpinning of calculations applicable to pharmacy practice.
2. Gives a pharmacy student; skills in handling calculations concerning concentration expressions, density and specific gravity, reducing and enlarging formula, isotonicity, buffers and reaction kinetics.
3. Provides a pharmacy student; skills in handling medicinal prescription and its pertaining calculations.

Topics to be covered:

Topic	No. of week
Introduction	1
Fundamental of calculations	2
International and common system of measurements	3
Inter- and intra conversion between different systems	4
Percentage, ratio strength	5
Dilution, concentration and allegation	6
Density, specific gravity and specific volume	7
Prescriptions, use of abbreviations and symbols	8
Calculation of doses	9
Buffer solutions	10
Isotonic solutions	11
Kinetic and reaction order and half life	12
Exam	13

Course description:

this course is designed to introduce the quantitative and basic principles of pharmaceutical calculations to pharmacy practice and pharmaceutical science.

Book references:

- Pharmaceutical Calculations, author: Howard C. Ansel, Mitchell J. Stoklosa.
- Pharmaceutical and Clinical Calculations, Author: Mansoor A. Khan, Indra K. Reddy.