



Course Description

PTN0006 | Pharmacy Calculations | 3.00 credits

This is a course in Pharmacy Calculations. Students will learn to define systems of measurement, convert from one system to another, and calculate pharmacology problems. Prerequisite: HSC 0003; corequisite: PTN0003.

Course Competencies:

Competency 1: The student will demonstrate an understanding of measurement as it relates to pharmacy practice by:

1. Explaining the difference between a cubic centimeter and a milliliter.
2. Converting measurements within the apothecary, avoirdupois, and metric systems.
3. Describing the correct techniques for measuring individual doses of medication

Competency 2: The student will demonstrate an understanding of calculating techniques as they relate to community pharmacy practice by:

1. Describing the various techniques of preparing solutions, suspensions, elixirs, emulsions, and extracts.
2. Calculating ratios, proportions, and percentages.
3. Describe the correct techniques for counting individual doses of medication.

Competency 3: The student will demonstrate a knowledge of pharmaceutical equipment as it relates to community pharmacy by:

1. Using common pharmaceutical weighing machinery.
2. Using standard pharmaceutical volume measurement apparatus.
3. Identifying automated medication dispensing equipment and its proper use.

Competency 4: The student will demonstrate an understanding of extemporaneous compounding as it relates to community and hospital pharmacy settings by:

1. Calculating allegations, IV flow rates, dilutions, and concentrations.
2. Describe the various compounding techniques to mix sterile and non-sterile compounds.
3. Describe the correct ways to label and package the compounds.

Learning Outcomes:

1. Numbers / Data
2. Critical Thinking
3. Communication
4. Information Literacy
5. Computer / Technology Usage