

NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

COURSE SYLLABUS

Course Title: College Forum: Medical Math

Course # COL 100

Course Description: 1 credit

This course includes a study of fractions, decimals, percentages, proportions, dimensional analysis, measurement systems, recording drug administration, dosage calculations, IV calculations, IV piggyback delivery calculations, body weight conversions, and drip rate calculations. *This course does not fill a math requirement. Credit does not fulfill degree requirements and is not transferable outside the Connecticut Community College system.*

Goals: Students will:

1. Exhibit perseverance, ability, and confidence to use mathematics to make sense of and solve problems
2. Perform mental arithmetic and use proportional reasoning
3. Use of dimensional analysis for unit conversions
4. Communicate understanding of drug orders and how to read them
5. Demonstrate the ability to compute medical related calculations

Course Outcomes:

At the completion of Nursing/Vet Tech Math students will be able to do the following:

Fractions, Decimals, Percentages:

- a) Add, subtract, multiply, and divide decimals and fractions without a calculator
- b) Identify the relationship between fractions, decimals, and percentages

Proportions

- a) Understanding concepts of ratios and proportions
- b) Solve a proportion for an unknown

Dimensional Analysis

- a) Setup conversion problems
- b) Identify conversion factors
- c) Solve a conversion problem

Measurement Systems

- a) Identify metric units vs English
- b) Convert from metric to metric
- c) Convert from metric to English or English to metric

Recording Drug Administration

- a) Interpret drug orders
- b) Understand military time

Calculations

- a) Dosage calculations with conversions

- b) IV Calculations (simple & complex)
- c) IV Piggyback Delivery Calculations
- d) Body Weight Conversions