

Flow Chart of Math IV Pacing Guide (Health Science)

Pre-knowledge
(First Semester) Completed by
the Mathematics Instructor

Embedded Math within Curriculum 2nd and 3rd Semesters

Module I

Competency 1:

Calculate multiplication and division problems. This will include the memorization of multiplication matrixes through 12 X 12 and long division without the aid of a calculator

Competency 2:

Be able to interpret roman numerals correctly from 1 to 1000.

Competency 3:

Be able to accurately interoperate and compute fractions, decimals, percentages, ratios, and proportions.

Competency 4:

Apply the concepts of apothecaries' system to make conversions from one measure to another.

Module II

Competency 1:

Be able to analyze the metric system and make conversions from one measure to another.

Competency 2:

- a. Be able to synthesize the values of household measuring systems and their equivalent.
- b. Measuring height with an upright scale.

Competency 3:

Be able to make connections involving the units used in household measuring systems, apothecaries' system, and the metric system.

Competency 4:

Be able to differentiate between common abbreviations and symbols to interpret their proper application toward solving medication problems.

Module III

Competency 1:

Be able to employ formulas that determine the dosages of tablets, capsules, or liquids.

Competency 2:

Be able to utilize formulas that determine the total number of tablets, capsules, or amount of liquid to be ordered for a specified time.

Competency 3:

- a. Differentiate between standard time and military time.
- b. Fahrenheit and Centigrade conversions

Competency 4:

Calculate dosages for parenteral injections, including those for special preparations such as insulin.

Module IV

Competency 1:

Be able to calculate flow rates for infusions.

Competency 2:

Investigate three different rules used to calculate medication dosages for children.

Competency 3:

Be able to collect vital sign data for graphing entries to synthesize conclusions and critique patient's status.

Competency 4:

Be able to collect intake/output data from a patient's routine care for the purpose of completing a patient care flow or spreadsheet.

Post-Knowledge

Last Semester- Real World
Situational Math Project
Designed by the Math Instructor
and Program Instructor