

Flow Chart of Math IV Pacing Guide (Construction Technology)

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

Embedded Math within Curriculum 2nd and 3rd Semesters

Module I

Competency 1:

To learn how to measure with various measuring instrumentations and devices

Competency 2:

To calculate the perimeter of a square, rectangle, circle, and other polygons

Competency 3:

To study the parts of a triangle and how Pythagorean's theorem is used to find the hypotenuse of a right triangle

Competency 4:

To study construction geometry in reference to degree measurements of angles, triangles, circles, and rectangles

Module II

Competency 1:

To study the area of squares, circles, parallelograms, trapezoids,

Competency 2:

To investigate the measurement of board feet

Competency 3:

To study the surface area of irregular shapes

Competency 4:

To study the volume of cubes, rectangular structures, cylinders, and complex containers

Module III

Competency 1:

To study weight in English and Metric system measurements

Competency 2:

To investigate the relevance of percentages in reference to income, taxes, profit, loss, material, labor, and overhead (Pie Charts)

Competency 3:

To understand the terms of Azimuth, bearing, degrees, minutes, and seconds in reference to land surveying

Competency 4:

To study the area of land and how land is divided into townships, sections, and acres

Module IV

Competency 1:

To utilize the concepts of rise, run, and slope while constructing stair steps.

Competency 2:

To utilize the concepts of rise, run, and slope while making rafter and truss constructions.

Competency 3:

To have a general knowledge of electrical wiring and how to calculate volts, amps, watts and ohms using Ohm's Law.

Competency 4:

To have a general knowledge of how to operate trigonometric functions

Post-knowledge

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