

Flow Chart of Math IV Pacing Guide (Welding)

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

Embedded Math within Curriculum 2nd and 3rd Semesters

Module I

Competency 1:

To study direct measure and how to use different increments on a measuring device

Competency 2:

To Study tolerance and equivalent units of measure

Competency 3:

The study of perimeters in reference to squares and rectangles

Competency 4:

The study of perimeters in reference to circles and semicircles

Module II

Competency 1:

The study of angular measure and how to use protractors and other measuring devices

Competency 2:

The study of area in reference to squares and rectangles

Competency 3:

The study of area in reference to triangles and trapezoids

Competency 4:

The study of area in reference to circular and semicircular objects and figures

Module III

Competency 1:

The study of volume in reference to rectangular containers

Competency 2:

The study of volume in reference to cylindrical and semicircular containers

Competency 3:

The study of volume in reference to cylindrical and complex containers

Competency 4:

The study of mass in terms of weight and measure

Module IV

Competency 1:

The study of metal expansion as a result of bending and stretching material in reference to square and rectangular shapes

Competency 2:

The study of metal expansion as a result of rolling and stretching out material in reference to circles and semicircles

Competency 3:

To study economic layout of rectangular shaped plates and odd shaped plates

Competency 4:

A. To study linear end lengths for intermittent welds using previously derived formula
B. Interpreting Blueprints

Post-Knowledge

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