Brad Schlagheck

EDTL 7100

**Unit Intended Learning Outcomes**

**Subunit One: Graphing Lines**

* Students will compare the slope or rate of change in a linear situation. (Evaluation)
* Students will calculate x and y intercepts. (Application)
* Students will be able to formulate and manipulate equations in Point Slope Form as well as Slope Intercept Form. (Syntheses)
* Students will classify direct variation equations and problems. (Application)
* Students will compare linear inequalities to justify possible solutions. (Evaluation)
* Students will create lines of best fit if given a scatter plot. (Syntheses)

**Subunit Two: Geometry**

* Students will analyze the relationship between the area and perimeter of similar figures to understand the relationships that exist between dimensions. (Syntheses)
* Students will create diagrams and nets to help them formulate solutions to complex area and perimeter problems. (Syntheses)
* Students will calculate surface area and volume of 3D shapes using established formulas. (Applications)
* Students will create alternative 3D figures with equal volumes and surface areas. (Synthesis)
* Students will explain the strengths and weaknesses of various 3D figures for everyday applications. (Evaluations)

**Subunit Three: Probability**

* Students will assess surveys and samples to check for bias. (Evaluation)
* Students will compose simulations to examine possible outcomes. (Syntheses)
* Students will calculate and classify dependent and independent events. (Applications)
* Students will calculate and classify permutations and combinations. (Applications)
* Students will criticize decisions and predictions by analysis of probability. (Evaluations)