New Dev Ed Courses – Summary of Math 025 & Math 035 Course Topics/Competencies

# MATH

## MAT 025

## *This course provides an opportunity to customize foundational math content and statistical concepts specific to real-world applications. Upon completion, students should be able to successfully demonstrate the use of mathematics, technology and statistical concepts to solve practical problems while developing positive academic habits, learning strategies and growth mindset.*

## *Topics include but are not limited to:*

* Decimals
* Ratios (e.g., which would be prefaced with Fractions)
* Proportions
* Percentages
* Solving Basic Equations
* Geometrical Concepts
* Dimensional Analysis (e.g., Unit Conversions related to Measurement, which could include Perimeter, Area, Volume, etc.)
* Financial Applications
* Elements of Statistics
* Elements of Probability

*\* We encourage faculty to organically weave Growth Mindset, Technology, and other relevant topics into the curriculum for these new courses in a way that enhances student learning.*

*\** *In addition to the established SLOs/Course Competencies, faculty retain the flexibility locally to integrate further subtopics based on their professional judgment and available course time.*

## MAT 035

#### This course covers algebraic concepts with an emphasis on application & analysis. Upon completion, students should be able to successfully demonstrate mastery of algebraic concepts through application and analysis while developing positive academic habits, learning strategies and growth mindset.

## *Topics include but are not limited to:*

* Solving Equations
* Solving Inequalities
* Exponents
* Polynomials & Operations of Polynomials
* Factoring (including various factoring strategies)
* Concepts of Functions
  + Identifying [a variety of] Functions
  + Analyzing [a variety of] Functions
* Graphs of Functions
  + Identifying Graphs of Functions
  + Analyzing Graphs of Functions
* Rational Equations & Equations
* Radical Expressions & Equations
* Solving and Interpreting Real-World Mathematical Applications

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