Spokane Community College COURSE LEARNING OUTCOMES (CLO) AND OUTLINE

Course Title: Prefix and Course Number: Version Date:

Course Learning Outcomes

MATH 88

By the end of this course, a student should be able to:

- 1. Calculate descriptive statistics and construct graphical displays of summaries of data.
- 2. Convert units of measure and use in application problems.
- 3. Simplify exponential expressions that involve integer exponents.
- 4. Solve real-world direct variation problems through the application of equations, tables, and graphs.
- 5. Create and graph linear, quadratic, and exponential functions to model real-world situations using appropriate technologies.
- 6. Write the equation of a line from various pieces of information and illustrate it graphically.
- 7. Utilize the equation of a trendline for making accurate predictions.

Course Outline:

Statistics:

- Mean, Median, mode, weighted means.
- Scatterplots and line of best fit.
- Standard deviation.
- Graphical displays.

Numbers & Units:

- American units of measure for length, weight, and volume.
- Metric units of measure for length, weight, and volume.
- Scientific notation & standard notation.
- Exponent rules/negative exponents.

<u>Lines:</u>

- Positive /negative linear correlation.
- Trend lines.
- Slope and intercepts
- Equations of lines.
- Direct variations.
- Graphs, tables, and equations.
- Systems of linear equations (optional).

Functions

- Function graphs.
- Inputs/outputs and function notation
- Linear functions and models.
- Quadratic models
- Exponential functions and models.