## **MAT1020 - Elementary Statistics - CORE OUTCOMES**

Course Effective Date: Summer 2014 Outcome Approval Date: Fall 2023 Next Outcome Review Date: Fall 2028

Upon completion of this course, students will be able to:

- 1. Create graphical and numerical descriptions of quantitative and qualitative data
- 2. Calculate probabilities and percentiles related to a general normal distribution
- 3. Distinguish differences in data analysis and interpretation between observational data and data from designed experiments
- 4. Calculate and interpret a confidence interval for a single parameter, using both large and small samples
- 5. Perform and interpret a test of hypotheses for a single parameter, using both large and small samples
- 6. Perform and interpret statistical inference on the difference of two parameters
- 7. Fit and interpret a simple linear regression model, including correlation and scatterplots