

MDE 55 Course Outline

MDE 55* - Learning Support for Statistical Reasoning (3 CR)

Corequisite(s): MTH 155*

Course Type: Developmental

Description: Provides support to ensure success for students co-enrolled in Statistical Reasoning (MTH 155*). Course will review foundational topics through direct instruction, guided practice, and individualized support. Lecture 3 hours per week.

Objectives:

1. Students will employ a set of learning skills used before, during, and after class including specific skill for test preparation.
2. Students will demonstrate a knowledge of the value of having a growth mindset.
3. Students will complete a fixed commitment calendar and discuss the benefits of time management.
4. Students will discuss the reasons for taking notes and doing homework in a math class.
5. Students will discuss the need for varying perspectives when learning about a subject from various sources. As an example, students will compare/contrast textbook methods and instructor methods.
6. Students will discuss how “doing” Math is a vehicle to understanding Math.
7. Students will discuss Math as a skill and the need for practice to improve skills.
8. Students will engage in an activity to help them better understand how to use feedback from assessments.
9. Students will successfully be able to use a scientific calculator to evaluate formulas.
10. Students will be able to accurately calculate the sample mean, median, mode, percentile, quartile and standard deviation.
11. Students will distinguish the difference between a z-score and a sampling distribution z-score.
12. Students will create and analyze a simple sampling distribution.

13. Students will create and analyze frequency tables.

14. Students will demonstrate familiarity with Minitab software, including generating basic descriptive statistics, creating box plots and histograms.

Suggested Formative/Alternative Assessments:

“Pre-Test” to the credit test about 1 week ahead to give feedback

Test Error Analysis or Corrections

Weekly Quizzes or other Assignment to check understanding

[ADA Statement \(PDF\)](#)

[Title IX Statement \(PDF\)](#)