STAT G010N: MEASURES OF CENTRAL TENDENCY, DISPERSION, AND POSITION

Item	Value
Curriculum Committee Approval Date	03/04/2025
Top Code	170200 - Mathematics Skills
Units	0 Total Units
Hours	6-10 Total Hours (Lecture Hours 0; Lab Hours 6-10)
Total Outside of Class Hours	0
Course Credit Status	Noncredit: Support Course (U)
Material Fee	No
Basic Skills	Basic Skills (B)
Repeatable	Yes; Repeat Limit 99
Open Entry/Open Exit	Yes
Grading Policy	P/NP/SP Non-Credit (D)

Course Description

This noncredit course introduces the basic concepts of arithmetic mean, median, mode, range, standard deviation, variance, z-scores, percentiles, and outliers and is designed to provide complementary support for college-level statistics courses. COREQUISITE: MATH G100, MATH G103, MATH G104, MATH G115, MATH G115S, MATH G120, MATH G140, MATH G140S, MATH G170, MATH G180, MATH G185, MATH G280, MATH G285, MATH G287, STAT C1000, STAT C1000E, PSYC G140, SOC G125, or ECON G160. Open Entry/Open Exit. NOT DEGREE APPLICABLE. Not transferable.

Course Level Student Learning Outcome(s)

1. Course Outcomes
2. Compute the measures of center, spread, and location for a set of data.

Course Objectives

- 1. Compute the mean, median, and mode for a set of data.
- 2. Compute the range, variance, and standard deviation for a set of data.
- 3. Compute the z-score, percentile, and outliers for a set of data.

Lecture Content

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Lab Content

Measures of Center Arithmetic mean Median Mode Measures of Spread Range Variance Standard Deviation Measures of Position z-scores Percentiles Outliers

Method(s) of Instruction

- Enhanced NC Lab (NC2)
- Online Enhanced NC Lab (NC6)
- Live Online Enhanced NC Lab (NCA)

Reading Assignments

Textbook and instructor handouts

Writing Assignments

Writing solution methods to course concept problems within assignments and course assessments.

Out-of-class Assignments

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Demonstration of Critical Thinking

Students will demonstrate critical thinking and problem-solving skills by solving, analyzing, and interpreting the measures of center, spread, and position. Demonstrations will be shown by completing assignments, participating in discussions, and completing required assessments.

Required Writing, Problem Solving, Skills Demonstration

Students will demonstrate their problem-solving skills through completing assignments and course assessments by showing their step-by-step processes to solving problems from start to finish.

Eligible Disciplines

Mathematics: Master's degree in mathematics or applied mathematics OR bachelor's degree in either of the above AND master's degree in statistics, physics, or mathematics education OR the equivalent. Master's degree required.

Textbooks Resources

1. Required Illowsky, B., Dean, S.. Introductory Statistics, 2 ed. OpenStax (OER), 2023