**Data Analysis**

**Goals:**

Students develop skills in drawing conclusions and critically evaluating results based on data.

**Expected Learning Outcomes:**

1. Students understand basic concepts of statistics and probability.
2. Students comprehend methods needed to analyze and critically evaluate statistical arguments.
3. Students recognize the importance of statistical ideas.

***Scoring Rubric:***

Assessment of GE Data Analysis Courses

This scoring rubric is designed to help instructors and members of relevant committees assess how well students are meeting the ELOs as reflected in direct assessment methods. Students are not expected to have acquired all the knowledge, skills, and attitudes/perspectives listed under the various ELOs in order to complete the assignment satisfactorily. At a minimum, students are expected to meet Milestone 2.

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|  | Capstone(4) | Milestone (3) | Milestone(2) | Benchmark (1) |
| **(ELO 1)** **Students understand basic concepts of statistics and probability.**  | Student demonstrates understanding beyond basic concepts of statistics and probability. | Student demonstrates adequate understanding of basic concepts of statistics and probability. | Student demonstrates partial understanding of basic concepts of statistics and probability. | Student demonstrates limited understanding of basic concepts of statistics and probability.  |
| **(ELO 2)****Students comprehend methods needed to analyze and critically evaluate statistical arguments.** | Student demonstrates advanced comprehension of the methods for analyzing and critically evaluating statistical arguments. | Student sufficiently comprehends the methods needed to analyze and critically evaluate statistical arguments. | Student begins to comprehend methods for analyzing and evaluating statistical arguments. | Student demonstrates surface understanding of methods needed to analyze and critically evaluate statistical arguments |
| **(ELO 3)****Students recognize the importance of statistical ideas.**  | Student shows sophisticated understanding of the importance of statistical ideas. | Student recognizes the importance of statistical ideas. | Student begins to demonstrate some recognition for the importance of statistical ideas.  | Student only attempts to recognize the importance of statistical ideas.  |