

Information Systems (MS) – BUS

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Step 1: Student Learning Outcome

DLO 2.3: Measure value created by data, information, or knowledge strategies, processes, or projects.

Step 2: Assessment Methods and Measures

The assessment instrument used was the second problem in the fourth of five homework assignments during the Spring 2024 semester. The problem contains six questions and asks students to analyze the GDP of U.S. Students need to use the methods (unit root test, Box-Ljung test) and tools (data visualization including time series plot, ACF/PACF/EACF plots) learned in class to select best statistical models, estimate parameters in the models and provide reasonable forecasting for the GDP of the U.S in the next year.

Step 3: Criteria for Success

The following scale was developed to assess levels of student learning based upon total points on the assignment:

- 1.** Grade of 90 or higher (A- or A): exceeds expectations.
- 2.** Grade of 80 or higher (B-, B, or B+): meets expectations.
- 3.** Grade less than 80 (C+ or below): below expectations.

Step 4: Summary of Results

15 students assessed, 11 exceeded expectations, 4 met expectations

This assessment utilizes students enrolled in MIS 748: Time Series Analysis and Forecasting, Section 01 in the Spring 2024 semester. Out of a total of 22 students enrolled in the course, 15 students (68.2%) were enrolled in the Master of Science in Information Systems (MSIS) program. These 15 students were used for this analysis.

Step 5: Action Plan

Performance on the assignment was very strong, with a majority of students exceeding expectations. Students lost points mainly because they failed to identify the optimal models to fit GDP data. This is known to be a difficult topic for beginners, and in future semesters, it may be valuable to devote additional class time and in-class examples to this topic.