Program: **BIT Graduate Certificate in Data Analytics: Management (DAM)**

Fogelman College of Business & Economics - Spring 2019

Author: S. J. Schaeffer (sschaffr@memphis.edu)

Executive Summary

2018-2019

Summary: For the BIT Graduate Certificate in Data Analytics: Management (DAM), four (4) learning outcomes were assessed directly with students enrolled in selected DAT course sections over the Fall 2018 and Spring 2019 semesters. Faculty teaching the identified sections were provided with a pre-defined rubric for evaluating student skills across the three learning outcomes. For the DAT certificate, there were four (4) learning outcomes: LO1: Students can understand and analyze business problems in the context of data mining, text mining, web mining, and artificial intelligence, LO2: Students can identify appropriate data mining, text mining, web mining, and artificial intelligence to solve the business problem, LO3: Students are proficient in the use of current tools and software packages related to business analytics, data visualization, web analytics, and artificial intelligence, and (LO4) Students can demonstrate knowledge on the foundation of analytical methods. A rubric of Fair (score=1), Good (score=2), or Exemplary (score=3) was used to assess each student's skills within a given LO. The scores of all students were consolidated and a benchmark of no more than 10% at the fair level (score=1) for a given LO was established for corrective actions.

Results: DAM students were assessed in this cycle (Fall 2018/Spring 2019) with three LOs falling short of the 10% benchmark: LO1 (19% fair), LO2 (12% fair), and LO4 (13% fair)

Improvements taken: Success with all three of these LOs require strong math skills which often is a challenge for students coming into the DAM program. To address this need, the DAM program now requires that MIS-7700 (Fundamentals of Data Analytics) be completed in the first semester of any student pursuing the DAM certificate.

OUTCOMES	MEANS OF ASSESSMENT & BENCHMARKS/TASKS	RESULTS	ACTION TAKEN & FOLLOW-UP
LO1: Students can understand and analyze business problems in the context of data mining, text mining, web mining, and artificial intelligence. **Outcome Status:** Active	**Course Embedded Assessments –** In Fall 2018 / Spring 2019 semesters students, a total of 59 students in identified DAM course sections were assessed multiple faculty. Individual students were scored at one of three levels: 1=Fair, 2=Good, 3=Exemplary The results for all students included in the assessment were consolidated by LO and reviewed by a faculty committee. **Benchmark (and how determined):** The department's goal is that any LO with a Fair (score=1) of 10% or more required corrective action.	**Reporting Cycle:** 2018 - 2019 **Result Type:** Criterion Not Met A review of results from the assessment process showed that 19% of the assessed DAM students scored at the Fair (1) level on LO1 and thus did not meet the established benchmark and merited corrective action.	**Action Taken:** The 19% Fair level fell below the program's benchmark. To address this deficiency, the DAM program now requires all students to complete MIS-7700 (Fundamentals of Data Analytics) in the first semester of the DAM program.

LO2: Students can identify appropriate data mining, text mining, web mining, and artificial intelligence to solve the business problem. **Outcome Status:** Active	**Course Embedded Assessments –** In Fall 2018 / Spring 2019 semesters students, a total of 59 students in identified DAM course sections were assessed multiple faculty. Individual students were scored at one of three levels: 1=Fair, 2=Good, 3=Exemplary The results for all students included in the assessment were consolidated by LO and reviewed by a faculty committee. **Benchmark (and how determined):** The department's goal is that any LO with a Fair (score=1) of 10% or more required corrective action.	**Reporting Cycle:** 2018 - 2019 **Result Type:** Criterion Not Met A review of results from the assessment process showed that 12% of the assessed DAM students scored at the Fair (1) level on LO2 and thus did not meet the established benchmark and merited corrective action.	**Action Taken:** The 12% Fair level fell below the program's benchmark. To address this deficiency, the DAM program now requires all students to complete MIS-7700 (Fundamentals of Data Analytics) in the first semester of the DAM program.
LO3: Students are proficient in the use of contemporary tools and software packages relate to business analytics, data visualization, web analytics, and artificial intelligence. **Outcome Status:** Active	**Course Embedded Assessments –** In Fall 2018 / Spring 2019 semesters students, a total of 59 students in identified DAM course sections were assessed multiple faculty. Individual students were scored at one of three levels: 1=Fair, 2=Good, 3=Exemplary The results for all students included in the assessment were consolidated by LO and reviewed by a faculty committee. **Benchmark (and how determined):** The department's goal is that any LO with a Fair (score=1) of 10% or more required corrective action.	**Reporting Cycle:** 2018 - 2019 **Result Type:** Criterion Met A review of results from the assessment process showed that only 4% of the assessed DAM students scored at the Fair (1) level on LO3 and thus met the established benchmark.	**Action Taken:** The 4% Fair level met the benchmark. Thus, no recommendations for improvement were merited at this time.

| **LO4:** Students can demonstrate knowledge on the foundation of analytical methods.
Outcome Status: Active | **Course Embedded Assessments –** In Fall 2018 / Spring 2019 semesters students, a total of 62 students in identified DAM course sections were assessed multiple faculty. Individual students were scored at one of three levels:

1=Fair, 2=Good, 3=Exemplary

The results for all students included in the assessment were consolidated by LO and reviewed by a faculty committee.

Benchmark (and how determined): The department's goal is that any LO with a Fair (score=1) of 10% or more required corrective action. | **Reporting Cycle:** 2018 - 2019
Result Type: Criterion Not Met
A review of results from the assessment process showed that 13% of the assessed DAM students scored at the Fair (1) level on LO4 and thus did not meet the established benchmark and merited corrective action. | **Action Taken:** The 22% Fair level fell below the program's benchmark. To address this deficiency, the DAM program now requires all students to complete MIS-7700 (Fundamentals of Data Analytics) in the first semester of the DAM program. |