Assurance of Student Learning 2019-2020	
Gordon Ford College of Business	Information Systems
Applied Data Analytics Certificate 1734#	

Use this page to list learning outcomes, measurements, and summarize results for your program. Detailed information must be completed in the subsequent pages.

Student Learning Outcome 1: Model and computationally analyze business-oriented data

Instrument 1	In-class examinations and projects
Instrument 2	
Instrument 3	

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.	Met	Not Met

Student Learning Outcome 2: Critically identify appropriate data structures to solve business problems

Instrument 1	In-class examinations and projects
Instrument 2	
Instrument 3	

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.	Met	Not Met

Student Learning Outcome 3:

Instrument 1	
Instrument 2	
Instrument 3	

Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.	Met	Not Met

Program Summary (Briefly summarize the action and follow up items from your detailed responses on subsequent pages.)

Based on student performance on graded homework assignments and exams in BDAN 310, Drs Butterfield and Crews refined class assignments and expand class coverage of problematic topics.

Updates for BDAN 330 resulted from reviewing potential employers' assessments of our graduates and in combination with exit interviews with students, SQL [Structured Query Language] was deemed as a potential gap in skills needed to succeed. Therefore, SQL was introduced, first as basic commands in Access (part 1), then using a free software tool ,MySQL.

Student Learning Outcome 1	
Student Learning Outcome	**Model and computationally analyze business-oriented data**
Measurement Instrument 1	**NOTE: Each student learning outcome should have at least one direct measure of student learning. Indirect measures are not required.** Direct measures of student learning. Students were given data set projects that required them to synthesize their work in the program's core courses.
Criteria for Student Success	Describe what outcomes or achievements should be reached for a student to have "succeeded" using the instrument above. Please attach rubric. Students at the end of the program should be able to create an analytical model to solve a current business problem.

Program Success Target for this Measurement	90% of the students will be proficient in their ability to analyze data	**Percent of Program Achieving Target**	95%
Methods	Students were given projects to analyze in the following courses: CIS 243 Principles of Management Information Systems BDAN 310 - Business Data Analytics BDAN 330 - Structured Data Analysis BDAN 410 - Decision Support Systems Analysis and Design BDAN 420 - Data Mining BDAN 430 - Data Visualization and Digital Dashboards Due to the pandemic, students were assessed via online presentations. Those summary presentations for BDAN 430 are attached. Youtube links are found in the summary presentations.		
Measurement Instrument 2			
Criteria for Student Success			
Program Success Target for this Measurement		**Percent of Program Achieving Target**	

Methods			
Measurement Instrument 3			
Criteria for Student Success			
Program Success Target for this Measurement		**Percent of Program Achieving Target**	
Methods			

	Met	Not Met
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.	<mark>Met</mark>	Not Met

Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)

Based on feedback from the final projects and exams in each of the core classes the following changes occurred.

Based on student performance on graded homework assignments and exams in BDAN 310, Drs Butterfield and Crews refined class assignments and expand class coverage of problematic topics.

Updates for BDAN 330 resulted from reviewing potential employers' assessments of our graduates and in combination with exit interviews with students, SQL [Structured Query Language] was deemed as a potential gap in skills needed to succeed. Therefore, SQL was introduced, first as basic commands in Access (part 1), then using a free software tool ,MySQL.

Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)

The department evaluates all the major and service courses each year for student and market relevance. Examples of changes brought about by these discussions are listed in the "Actions" section.

Student Learning Outcome 2	
Student Learning Outcome	**Critically identify appropriate data models to solve business problems**
Measurement Instrument 1	**NOTE: Each student learning outcome should have at least one direct measure of student learning. Indirect measures are not required.** **In-class examinations and projects** Direct measures of student learning. Students were given data set projects that required them to synthesize their work in the program's core courses.
Criteria for Student Success	Students will convert data modeling results into insights that are useful in making decisions.

Program Success Target for this Measurement	90%	**Percent of Program Achieving Target**	95%

Methods	Students were given projects to analyze in the following courses: CIS 243 Principles of Management Information Systems BDAN 310 - Business Data Analytics BDAN 330 - Structured Data Analysis BDAN 410 - Decision Support Systems Analysis and Design BDAN 420 - Data Mining BDAN 430 - Data Visualization and Digital Dashboards A detailed grading rubric was used for a final presentation in BDAN 420. A detailed grading rubric for the final project was used for BDAN 430. Due to the pandemic, students were assessed via online presentations. Those summary presentations for BDAN 430 are attached. Youtube links are found in the summary presentations. .
Measurement Instrument 2	
Criteria for Student Success	

Program Success Target for this Measurement		**Percent of Program Achieving Target**	

Methods	
Measurement Instrument 3	
Criteria for Student Success	

Program Success Target for this Measurement		**Percent of Program Achieving Target**	

Methods			
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.		**Met**	**Not Met**

Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)

Based on feedback from the final projects and exams in each of the core classes the following changes occurred.

Based on student performance on graded homework assignments and exams in BDAN 310, Drs Butterfield and Crews refined class assignments and expand class coverage of problematic topics.

Updates for BDAN 330 resulted from reviewing potential employers' assessments of our graduates and in combination with exit interviews with students, SQL [Structured Query Language] was deemed as a potential gap in skills needed to succeed. Therefore, SQL was introduced, first as basic commands in Access (part 1), then using a free software tool ,MySQL.

Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)

The department evaluates all the major and service courses each year for student and market relevance. Examples of changes brought about by these discussions are listed in the "Actions" section.