PROGRAM ASSESSMENT REPORT

Program Code	CTRBUS	Name	Retail and Business Operations Certificate
Division	BCT	Department	Business

Award ☐ A.A. ☐ A.S ☐ A.A.S.
   XX Cert. ☐ Adv. Cert. ☐ Post-Assoc. Cert. ☐ Cert. of Completion

I. Review previous assessment reports submitted for this program and provide the following information.

1. Was this program previously assessed and if so, when?

   This is the first assessment for the Retail and Business Operations Certificate.

2. Briefly describe the results of previous assessment report(s).

   N/A

3. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

   N/A

II. Background Information

1. Indicate the semester(s) and year(s) assessment data were collected for this report.

   2017-18 and 2018-19

2. Assessment tool(s) used (check all that apply):

   ☐ Portfolio
   ☐ Standardized test
   ☐ Other external certification/licensure exam (please describe):_ _____
   ☐ Graduate Survey
   ☐ Employer Survey
   ☐ Advisory Committee Survey
   ☐ Transfer follow-up
   ☐ Externally evaluated performance or exhibit
   ☐ Externally evaluation of job performance (internship, co-op, placement, other)
   ☐ Capstone experience (please describe):
   XX Other (please describe): Program Map, Success Rates from IR, Course Assessments

3. Have any of these tools been used before?

   ☐ Yes (if yes, identify the tool below and describe any changes made since it was last administered)
   XX No

   Changes:
   This is the first assessment for the Retail and Business Operations Certificate.

4. Indicate the number of students assessed/total number of students enrolled in the course(s)/program.

> The original assessment plan was created in Fall 2011. It called for students enrolled in any of the four (now five) required courses who are completing the certificate in the assessment semester to be included in the assessment population and sampling. While this may appear logical, it is not practical for several reasons.
>
> - This is not a cohort model. The five courses are not taken in a sequential order. Students can take the courses in any order they prefer in a way that works best with their schedules.
>
> - Identifying the students targeted in the original plan would be difficult to discern. In addition, finding individual performance for those students in each of the classes in the program would also be time consuming and difficult to discern.
>
> - The average number of active students in the program from Fall 2017 to Winter 2019 is 12. If you whittle this down to just those who are completing the certificate for the assessment semester, it does not yield a large sample.
>
> Therefore for this assessment, I created a revised Program Assessment Plan (PAP) which is being submitted along with this assessment. It is the revised PAP that was used for this assessment.

5. Describe how you selected students for the assessment.
   a. Describe your sampling method.
   b. Describe the population assessed (e.g. students in capstone course, graduating students, alumni).

> All students taking the required certificate courses in the semester being assessed

III. Results

1. State every outcome (verbatim) from the Program Assessment Planning or Program Proposal form for the program.

Course Mapping

Program Outcomes	Courses in the Program				
	BMG 205 Creating the Customer Experience	**BMG 206 Retail Principles and Practices**	**BMG 228 Purchasing and Inventory Control**	**BMG 273 Managing Operations**	**BMG 275 Business & Supply Chain Analytics**
Identify and apply the techniques used to make and communicate decisions related to strategy, profits, productivity, projects, and processes when managing the operations aspect of a business unit.			X	X	X
Identify and apply the principles and practices of managing, marketing, selling, promoting, and distributing retail goods and services.	X	X			

2. Briefly describe assessment results based on data collected during the program assessment, demonstrating the extent to which students are achieving each of the learning outcomes listed above. ***Please attach a _summary of the data collected_ (as a separate document).*** *Add more lines as needed.*

Awards for this program are consistently 6-7 graduates per year.

Program Outcome 1 (BMG 228, 273, 275):
Identify and apply the techniques used to make and communicate decisions related to strategy, profits, productivity, projects, and processes when managing the operations aspect of a business unit.

BMG 228 Purchasing and Inventory Control
This course will be assessed for the first time during the Fall 2019 semester.

Current Course Outcomes

1. Use purchasing vocabulary and concepts related to source selection, pricing, quality, supplier management, and negotiation strategies to effectively purchase goods and services for an organization.

2. Identify and apply concepts related to maintaining inventory investments at reasonable levels while providing sufficient inventory to meet demand.

3. Perform business math calculations related to purchasing, buying, and inventory management.

BMG 273 Managing Operations
This course was last assessed in 2012 with the conclusion that the assessment tool effectiveness was average. A second assessment is scheduled for Fall 2019.

Current Course Outcomes

1. Compare and contrast the roles of operations management and managing operations.

2. Review a business operation to evaluate and communicate the processes, measures, and goals that drive the profitability of the business.

3. Critically evaluate as well as make and communicate decisions relating to profits, people (productivity) and the product (processes).

4. Quantify decisions in terms of cost relating to scheduling, budgeting, cost control, cost-cutting, profit maximization, and customer service.

5. Identify potential profit opportunity.

BMG 275 Business and Supply Chain Analytics
This course also underwent an assessment (submitted April 2017) which resulted in a major overhaul to update everything to Excel 2016 for the 2017-18 academic year. Another assessment was submitted during the Winter 2019 semester. Standard of success to be used for this assessment: 75% of students scoring 70% or better.

Course Outcome 1: Identify the problem-solving process and associated analytic decision-making tools used in business and supply chain management.

For the April 2017 assessment, 75% of the students scored 70% or better. The result for Winter 2019 was 82.8%.

Course Outcome 2: Analyze data and make decisions using problem-solving, decision-making and Excel analytic tools.

For the April 2017 assessment, descriptive statistics aspect of this outcome, 81% of the students scored 70% or better; predictive statistics, 82%; and prescriptive 94% for the If Function and 83% for inductive/deductive reasoning. The Winter 2019, the result for all three was 82.8%.

Program Outcome 2 (BMG 205 & 206):
Identify and apply the principles and practices of managing, marketing, selling, promoting, and distributing retail goods and services.

BMG 205 Creating the Customer Experience
The first assessment for this course was submitted in Fall 2012 and a second one was completed and approved in February 2018. The results of the two assessments are below and show a significant improvement.

Course Outcome 1: Explain the fundamental principles of creating the customer experience.
The results for the second assessment were significantly better than the Fall 2012 assessment - 90.10% vs. 78.8%.

Course Outcome 2: Apply the strategies for creating and delivering a quality customer experience.
The results for the second assessment were significantly better than the Fall 2012 assessment report - 90.14% vs. 73.43%.

Course Outcome 3: Judge their personal effectiveness when delivering the customer experience.
The results for the second assessment were somewhat better than the Fall 2012 assessment report - 92.42% vs. 84.3%.

BMG 206 Retail Principles and Practices
This first assessment report is being submitted during the Winter 2019 semester. The results are shared here. Three semesters were assessed: Fall 2018, Spring/Summer 2018, and Winter 2018.

Course Outcome 1: Identify the foundational concepts central to any brick-and-mortar or online retail environment.
Overall for all three semesters 83% scored 70% or better on the departmental tests. For the four blogs, the totals over the three semester were 90%, 92%, 94%, and 91% respectively.

Course Outcome 2: Recognize and apply the principles and practices related to managing the retail offering.
Overall for all three semesters, 71% scored 70% or better on the departmental test. For the discussion, overall for all three semesters, 89% scored 70% or better.

Course Outcome 3: Recognize and apply the principles and practices related to communicating the retail offering.
Overall for all three semesters, 89% scored 70% or better on the departmental test. For the discussion, overall for all three semesters, 89% scored 70% or better.

Course Outcome 4: Recognize and apply the principles and practices of managing the operations of a retail organization.
Overall for all three semesters, 71% scored 87% or better on the departmental test. On the discussion, overall for all three semesters, 81% scored 70% or better. For the Take 10s, students did not meet the stated target - Markups and Markdowns with a 66% result and Income Statements 2 with a 67% result over three semesters respectively.

3. Describe the areas of strength and weakness in students' achievement of the learning outcomes shown in assessment results.

When looking at course assessment results to investigate specific strengths and weaknesses, there has been improvement in the percentage of students meeting the standards for success. Four of the five courses (BMG 205, 206, 228, and 275) are new courses that had never been offered prior to this program being developed and launched in 2012 and revised in 2015. Note that the fifth course, BMG 273, is part of the Management Program, and the lead instructor is Donna Rochester.

Program Outcome 1 (BMG 228, 273, 275):
Identify and apply the techniques used to make and communicate decisions related to strategy, profits, productivity, projects, and processes when managing the operations aspect of a business unit.

BMG 228 Purchasing and Inventory Control
Based on feedback from industry experts and the Business Advisory Board, BMG 228 replaced BMG 227 (Merchandising and Inventory Control) during the 2015-16 academic year.

Course Outcomes

1. Use purchasing vocabulary and concepts related to source selection, pricing, quality, supplier management, and negotiation strategies to effectively purchase goods and services for an organization.

2. Identify and apply concepts related to maintaining inventory investments at reasonable levels while providing sufficient inventory to meet demand.

3. Perform business math calculations related to purchasing, buying, and inventory management.

Summary
This course scheduled for an assessment during the Fall 2019 semester with the report submitted Winter of 2020. Anthony Terry is the lead instructor for this course and will do the assessment. A departmental exam will be used with a standard of success as 75% of students will score 70% or better.

BMG 273 Managing Operations

The lead instructor for this course has changed several times over the past few years. Julie Davies took over when Kim Hurns became the Dean of the BCT Division, and now Donna Rochester is the lead. That means BMG 273 has been "tweaked" by the various lead instructors for the past few years. For example, in Winter 2011, an online simulation was added to the course that seemed to help students better understand and apply some of the concepts. That simulation was later removed from the course.

This course was last assessed in 2012 with the conclusion that the assessment tool effectiveness was average. While changes were made to address student learning, the questions on the instrument that was used needed to be addressed to achieve course alignment and clarity.

Finally, a revised Master Syllabus was submitted effective Winter 2013, and a new textbook edition has recently replaced the previous one.

Current Course Outcomes

1. Compare and contrast the roles of operations management and managing operations.

2. Review a business operation to evaluate and communicate the processes, measures, and goals that drive the profitability of the business.

3. Critically evaluate as well as make and communicate decisions relating to profits, people (productivity) and the product (processes).

4. Quantify decisions in terms of cost relating to scheduling, budgeting, cost control, cost-cutting, profit maximization and customer service.

5. Identify potential profit opportunity.

Summary

Now that Donna Rochester has assumed the role of lead instructor, more stability in the course design and implementation is anticipated. She plans to do a course assessment in Fall 2019 with the report submitted Winter 2020.

BMG 275 Business and Supply Chain Analytics

This course was created based on recommendations by the School of Business and Entrepreneurial Studies Advisory Board. They said, "We need employees who can manipulate data for us in Excel." Therefore, the course was created and incorporated into the Retail and Supply Chain Operations certificate and the Supply Chain Operations certificate. It is now also part of the Applied Data Analytics certificate which is a joint effort between the Business and CIS departments.

Conversations and reviews with the BMG Advisory Board and from analytics experts who use Excel daily are used to continuously review the content of the course. We have tweaked the course twice, and BMG 275 underwent a minor revision for the 2016-17 academic year.

This course underwent an assessment (submitted April 2017) which resulted in a major overhaul to update everything to Excel 2016 for the 2017-18 academic year and the changes were implemented in Winter 2017. We added VLookup functions and eliminated Scenario Manager functions. The group project was eliminated and in its place we added more virtual meetings with the instructor. Videos were updated using Lynda.com, and we eliminated Youtube videos where possible.

Standard of success to be used for this assessment: 75% of students scoring 70% or better.

Outcome 1: Identify the problem-solving process and associated analytic decision-making tools used in business and supply chain management. (Current Master Syllabus)
For the April 2017 assessment, 75% of the students scored 70% or better. The unit tests seemed to be the downfall of a number of students. The unit tests focus on the concepts rather than the actual using of the Excel tools.

To compensate for this and to prepare students to understand what these tests cover, the redesigned course now has practice quizzes, so students can study for the unit tests. The redesigned course also addressed the problem solving and decision making tools in more detail and with more background, so students would understand the underlying reasons to use the Excel tools.

The two main areas of strength for Outcome 1 were Mind Maps & Affinity Diagrams. The discussion about Effective Teams which combined personal experience on teams with outside research was also a strength.

The Winter 2019 assessment showed that 82.8% of students received a 70% or better. The unit tests and three graded Excel assignments were used to assess this outcome. The low score is primarily due to non-submission of assignments and not the actual performance on the assignment. Students seem to struggle with the decision tree process. One improvement we plan to make is adding more practice problems.

Outcome 2: Analyze data and make decisions using problem-solving, decision-making and Excel analytic tools. (Current Master Syllabus)
The original Master Syllabus had three outcomes and distinguished between descriptive, predictive, and prescriptive analytics. The April 2017 assessment of Outcome 2 was based on the original outcomes.
Descriptive: 81% of the students scored 70% or better with nine assignments used to assess this outcome. When reviewing the data, however, two areas of concern surfaced. The biggest area of concern was pivot tables. While 76.5% scored 70% or better, there were no students in the A-range. Therefore, the redesigned course for W17 spent more time explaining the purpose of pivot tables as well as explaining how to create them in Excel.

The other area of concern was the group project to create an action plan with 41.2% failing. This was due entirely to non-participation. Online group projects are difficult and since the Master Syllabus does not require any, we eliminated this group project in the redesigned W17 course and dealt with action plans on an individual basis.

The major areas of strength were creating informative and visually appealing charts, Fishbone diagrams, and Control Charts in Excel. Students also did well on the Quick Quiz about adaptive techniques used in problem solving.

Predictive: 82% of the students scored 70% or better with eight assignments used to assess this outcome. When reviewing the data, however, two areas of concern surfaced. The biggest area of concern was the Solver Excel tool. Only 63.6% of the students scored 70% or better with 36.4% failing. In talking with members of the Business Advisory Board and industry experts who use Excel in their daily work, it was determined that Solver is not a tool frequently used. It was recommended that we replace this with VLOOKUP which is used often. Therefore, the redesigned course for W17 did not include Solver and does include VLOOKUP.

The other area of concern was the What-If Tables & Goal Seek with 1/3 of the class failing this assignment. The redesigned course for W17 includes more videos about how and why this tool is used as well as how to manipulate data in Excel using What-If Tables and Goal Seek.

Prescriptive: Students did well on the If Function in Excel with 94% of students receiving a 70% or better. For the Quick Quiz about inductive/deductive reasoning and associated fallacies, 83% of students scored 70% or better.

Following the April 2017 assessment, a new master syllabus was created using only two course outcomes. The Winter 2019 assessment is based on the second outcome in the new syllabus which is identified above.

Twenty-seven assignments were used to assess this outcome with 82.8% of students scoring 70% or higher. They seem to do very well with building charts, If Statements, and VLOOKUP functions. They do struggle with some of the more advanced functions such as decision matrices, Nested If statements, Pivot Tables, sorting and filtering.

Summary
This course is a difficult one for students. One overall major concern is that students struggle analyzing the stories that the data are telling. True analysis is interpreting the numbers, lines, and trends. They also struggle with simply following instructions. The plan is to revisit the course, start with a clean slate, and redesign the course to address the concerns noted in the course assessments.

Program Outcome 2 (BMG 205 & 206):
Identify and apply the principles and practices of managing, marketing, selling, promoting, and distributing retail goods and services.

BMG 205 Creating the Customer Experience
When this course was first offered in Fall 2009, there were no textbooks available on this topic and no college classes on the subject. Therefore, the course was created using outside sources. That includes lectures from one of the authors of "The Experience Economy" and videos licensed from Zingerman's. Students also hear from a panel of three Certified Customer Experience Experts. They also read articles by Lou Carbone (author of Clued In) and Steve Haeckel who published the first article about creating customer experiences in 1994 in the Marketing Management publication.

The first assessment for this course was submitted in Fall 2012. Based this assessment and continued monitoring of the course and the industry, a major revision of the course was completed during the summer of 2016.

By then customer experience was a common topic of conversation at companies, resulting in more refined approaches, concepts, and available material. The revised course was first offered in Fall 2016. The revisions included going from 5 units to 4 units, being more selective on outside readings and videos, and adding more interactive activities. Additional modules were added covering newer practices, such as Customer Journey Mapping (CJM) and the 5E model. Assignments and discussions were revised as well.

A second assessment was completed and approved in February 2018. In addition, a new master syllabus was submitted and approved in December 2017. The course outcomes are now assessed using a combination of departmental exams, assignments, discussions, and journals.

The results of the two assessments are below and show a significant improvement.

Course Outcome 1: Explain the fundamental principles of creating the customer experience.
The results for the second assessment were significantly better than the Fall 2012 assessment - 90.10% vs. 78.8%. This is due mainly to major course revisions made since the 2012 assessment. Students seem to quickly pick up the terminology and are able to correctly identify the various experience concepts (e.g., progression of economic value). Students also pick up on the relationship between customer experience, customer advocacy, and business success. Some students struggle with the difference between customer experience vs. customer service and use the terms interchangeably.

Course Outcome 2: Apply the strategies for creating and delivering a quality customer experience.
The results for the second assessment were significantly better than the Fall 2012 assessment report - 90.14% vs. 73.43%. Students are able to connect to the strategies and apply them to their lives through journaling and discussions.

Course Outcome 3: Judge their personal effectiveness when delivering the customer experience.
The results for the second assessment were somewhat better than the Fall 2012 assessment report - 92.42% vs. 84.3%. This is due mainly to major course revisions made since the 2012 assessment. Students evaluate this through reflective journaling and scrutinizing the results of several industry personal assessment instruments (e.g., Leadership Legacy, Social Styles, and Emotional Quotient).

Summary
In looking at the grade distributions, there is evidence of a bimodal trend - either students do well or they fall off and fail. The normal distribution curve does not exist for this course. It is hoped that the upcoming change to the student withdrawal process and some of the new Blackboard tools will help overcome the bimodal trend.

No plans are in place to make major changes to this course other than updating material for recency.

BMG 206 Retail Principles and Practices
This course first ran in Fall 2010 and went through a somewhat major revision during the 2015-16 academic year. A course assessment was completed and submitted during Winter 2019. The standard of success used was 75% of students scoring 70% or better on each tool.

1. Identify the foundational concepts central to any brick-and-mortar or online retail environment.
   Assessment Method: Departmental Test
   Results varied by semester with 64% earning a 70% or better on the departmental test in Fall 2018; 87% in Spring/Summer 2018; and 96% in Winter 2018. Overall for all three semesters, 83% scored 70% or better.
   Assessment Method: Blogs (about current events, trends, happenings)
   Results varied by semester but every semester met the target of 75% or more receiving a 70%or better score. The total for all four blogs over the three semester were 90%, 92%, 94%, and 91% respectively.

2. Recognize and apply the principles and practices related to managing the retail offering.
   Assessment Method: Departmental Test
   Results varied by semester with 64% earning a 70% or better on the departmental test in Fall 2018; 71% in Spring/Summer 2018; and 78% in Winter 2018. Overall for all three semesters, 71% scored 70% or better.

   Assessment Method: Discussion

Students participated in one discussion related to this outcome about returnaholics. The results varied by semester with 92% earning a 70% or better in Fall 2018; 89% in Spring/Summer 2018; and 85% in Winter 2018. Overall for all three semesters 89% scored 87% or better.

3. Recognize and apply the principles and practices related to communicating the retail offering.

   Assessment Method: Departmental Test
   Results varied by semester with 92% earning a 70% or better on the departmental test in Fall 2018; 95% in Spring/Summer 2018; and 80% in Winter 2018. Overall for all three semesters 89% scored 70% or better.

   Assessment Method: Discussion
   Students participated in one discussion related to this outcome about mobile technology. The results varied by semester with 88% earning a 70% or better in Fall 2018; 100% in Spring/ Summer 2018; and 88% in Winter 2018. Overall for all three semesters 89% scored 91% or better.

4. Recognize and apply the principles and practices of managing the operations of a retail. organization

   Assessment Method: Departmental Test
   Results varied by semester with 80% earning a 70% or better on the departmental test in Fall 2018; 95% in Spring/Summer 2018; and 87% in Winter 2018. Overall for all three semesters. 71% scored 87% or better.

   Assessment Method: Discussions
   Students participated in one discussion related to this outcome about RJPs. The results varied by semester with 76% earning a 70% or better in Fall 2018; 76% in Spring/Summer 2018; and 92% in Winter 2018. Overall for all three semesters 81% scored 87% or better.

   Assessment Method: Take 10s
   Students completed 10 departmental quizzes related to this outcome. All but two students met the stated target. The problem areas are Markups and Markdowns with a 66% result over three semesters and Income Statements 2 with a 67% result over three semesters.

Summary
The data from the Winter 2019 assessment was used for this analysis of the course. It is anticipated that this course will need a complete overhaul to include more about online retailing and other changes to the retail landscape. In addition a new Blackboard site will be needed given that the current one uses a CiTL "test format" that is cumbersome for instructors to use. The new course will follow the latest design protocol published by CiTL. Along with this, a new master syllabus was submitted in Winter 2019 and approved.

IV. Changes influenced by assessment results

1. Based on the previous assessment report Action Plan(s) identified in Section I above, please discuss how effective any changes were in improving student learning.

> **N/A – This is the first assessment for this program.**

2. If weaknesses were found (see above) or students did not meet expectations, describe the action that will be taken to address these weaknesses. If students met all expectations, describe your plan for continuous improvement.

> **No major changes to the program will be made. Several plans are in place, however, for the individual courses.**
>
> **BMG 205 – No changes are planned at this time. We are, however, testing the effectiveness of and student receptiveness to offering a blended version of this course. Since this course does not have a textbook, a long term goal would be to create a PDF version of a textbook that would be free to students.**
>
> **Winter 2019**
> **BMG 206 – It is anticipated that this course will undergo a major revision to update the material to keep up with the changing retail landscape and update the Blackboard course to meet the current WCC design standards. In addition, the textbook (a PDF created by WCC faculty with no cost to students) will need updating and made ADA compliant. Finally, the learning tools for Markups and Markdowns and Income Statements will be revised to improve student understanding of the concepts.**
>
> **BMG 275 – It is anticipated that major changes will be made to this course to improve the explanation of each Excel function, add more practice problems, and add more focus on the analysis of the data.**
> **Winter 2020**
> **BMG 228 is scheduled for an assessment during the Fall 2019 semester with the results being submitted Winter 2020. Anthony Terry is the lead instructor.**
>
> **BMG 273 will undergo an assessment during the Fall 2019 semester with the results being submitted Winter 2020. Donna Rochester is the lead instructor.**

3. Identify any other intended changes that will be instituted based on results of this assessment activity. Describe changes and give rationale for change. (Check all that apply).

None apply.

   a. ☐ Outcomes/assessments from Program Assessment Planning or Program Proposal form:

   b. ☐ Program Curriculum:
       ☐ Course sequencing
       ☐ Course deletion
       ☐ Course addition
       ☐ Changes to existing program courses (specify):
       ☐ Other (specify):

   c. ☐ Other (specify):

4. What is the timeline for implementing these actions?

> **See #2 above**

IV. Future plans

1. Describe the extent to which the assessment tools used were effective in measuring student achievement of learning outcomes for this program.

> **The course assessments were quite helpful in reviewing the overall program as well as the individual courses within the program.**

2. If the assessment tools were not effective, describe the changes that will be made for future assessments.

Submitted by:

Name: _Cheryl Byrne_   Date: _6-25-2019_
     Print/Signature

Department Chair: _Amy Watt_   Date: _6/28/19_
     Print/Signature

Dean: _Eva Samulski_   Date: _7-1-19_
     Print/Signature

Reviewed by AC 8/22/19

Please return completed form to the Office of Curriculum & Assessment, SC 257.

DEAN BCT DIVISION JUN 28'19