Washtenaw Community College Comprehensive Report

BMG 275 Business and Supply Chain Analytics
Effective Term: Fall 2017

Course Cover

Division: Business and Computer Technologies
Department: Business
Discipline: Business Management
Course Number: 275
Org Number: 13210
Full Course Title: Business and Supply Chain Analytics
Transcript Title: Bus and Supply Chain Analytics
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Three Year Review / Assessment Report
Change Information:
    Consultation with all departments affected by this course is required.
    Course description
    Outcomes/Assessment
    Objectives/Evaluation
Rationale: BMG 275 was created from scratch and the first master syllabus was approved for the Winter 2014 semester. Based on the results of the assessment completed in Winter 2016 and conversations with the School of Business and Entrepreneurial Studies Advisory Board, changes were made to the BMG 275 course content during the summer and fall of 2016. Now that the course has run for several semesters, it has "settled" and the master syllabus needs to accurately reflect the content of the course. The more esoteric Excel tools that are for more advanced users were deleted and other tools (Like VLOOKUP) that are used more frequently were added. The assessment contains more detailed information on this.
Proposed Start Semester: Fall 2017
Course Description: This course introduces students to a structured and logical approach to problem solving and decision making in business and supply chain situations. Students will have hands-on work using standard problem solving and decision-making tools, including the Excel data analysis tools. While gaining this extensive Excel hands-on experience, students also explore the challenges associated with data driven decision making.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 60 **Student:** 60
Lab: Instructor: 0 **Student:** 0
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 60 **Student:** 60
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

    College-level Reading & Writing

College-Level Math
No Level Required

Requisites

General Education

Request Course Transfer
Proposed For:
Central Michigan University
College for Creative Studies
Eastern Michigan University
Ferris State University
Grand Valley State University
Jackson Community College
Kendall School of Design (Ferris)
Lawrence Tech
Michigan State University
Oakland University
University of Detroit - Mercy
University of Michigan
Wayne State University
Western Michigan University

Student Learning Outcomes

1. Identify the problem-solving process and associated analytic decision-making tools used in business and supply chain management.
   Assessment 1
   Assessment Tool: Departmental Exam
   Assessment Date: Winter 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All students
   How the assessment will be scored: Answer sheet
   Standard of success to be used for this assessment: 70% of students scoring 70% or better.
   Who will score and analyze the data: Exam will be online with scoring done by computer. Lead instructor will analyze the data.

2. Analyze data and make decisions using problem-solving, decision-making and Excel analytic tools.
   Assessment 1
   Assessment Tool: Assignments
   Assessment Date: Winter 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All students
   How the assessment will be scored: Answer sheet to identify correct and incorrect answers.
   Standard of success to be used for this assessment: 70% of students scoring 70% or better.
   Who will score and analyze the data: Lead instructor will analyze the data.

Course Objectives
1. Identify the steps in the rational decision-making process.

2. Identify and define problems by creating effective problem statements, determining causes, and simplifying complex problems.
3. Develop alternatives and evaluate options using techniques such as decision matrices, cause & effect diagrams, and decision trees.
4. Identify the monitoring and control mechanisms needed to evaluate the effectiveness of decisions, such as control charts.
5. Recognize the difference between inductive and deductive reasoning.
6. Identify inductive and deductive logical reasoning fallacies.
7. Develop heuristics for optimizing business processes through the use of simulations.
8. Present user-friendly and informative data by visualizing data (e.g., bar/line/pie/bubble charts).
9. Identify when to use convergent and divergent thinking when solving problems.
10. Perform what-if and nested what-if analyses using Excel.
11. Use Excel financial functions such as PMT, RATE, NPER, and FV.
12. Sort and filter data using Excel.
13. Create pivot tables and charts using Excel.
14. Identify data correlations through simple linear regression and multiple regression tools in Excel.

New Resources for Course

Course Textbooks/Resources

Textbooks

Butterfield, J. *Problem Solving and Decision Making*, 3rd ed. Boston: Cengage, 2017, ISBN: 978-1-337-119.

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

Computer workstations/lab

Reviewer	Action	Date
Faculty Preparer:		
Cheryl Byrne	*Faculty Preparer*	*Dec 15, 2016*
Department Chair/Area Director:		
Julianne Davies	*Recommend Approval*	*Jan 12, 2017*
Dean:		
Kimberly Hurns	*Recommend Approval*	*Jan 13, 2017*
Curriculum Committee Chair:		
David Wooten	*Recommend Approval*	*Mar 08, 2017*
Assessment Committee Chair:		
Ruth Walsh	*Recommend Approval*	*Mar 09, 2017*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Mar 15, 2017*