Washtenaw Community College Comprehensive Report

## BMG 180 Introduction to Logistics and Supply Chain Management Effective Term: Winter 2014

Course Cover **Division:** Business and Computer Technologies **Department:** Business **Discipline:** Business Management Course Number: 180 **Ora Number:** 13210 **Full Course Title:** Introduction to Logistics and Supply Chain Management **Transcript Title:** Intro to Supply Chain Mngmnt Is Consultation with other department(s) required: No **Publish in the Following:** College Catalog , Time Schedule , Web Page Reason for Submission: Course Change Change Information: Consultation with all departments affected by this course is required. Pre-requisite, co-requisite, or enrollment restrictions **Rationale:** Revising prerequisite courses Proposed Start Semester: Fall 2013

**Course Description:** The course covers the concepts, processes, and strategies of Supply Chain Management (SCM), which involves the coordination of suppliers, manufacturers, distributors, and retailers to ensure that products and services are available to the final consumer in a timely and cost-effective fashion while maintaining the service level customers demand. Topics include 21st Century supply chains and network designs, procurement and manufacturing, integrated operations planning, inventory management, transportation operations, warehousing and materials handling, relationship management, as well as operational and financial performance measures. Attention is paid to aligning supply chain strategies with corporate goals, analyzing current ethical and sustainable issues, and employing various analytical techniques used in solving supply chain-related problems.

#### Course Credit Hours

Variable hours: No Credits: 3 Lecture Hours: Instructor: 45 Student: 45 Lab: Instructor: 0 Student: 0 Clinical: Instructor: 0 Student: 0

Total Contact Hours: Instructor: 45 Student: 45 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 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 concepts, processes, and strategies used when designing, managing, and improving a supply chain that is competitive, timely and cost-effective, while maintaining the service level customers demand.

#### Assessment 1

Assessment Tool: Departmental Exam Assessment Date: Winter 2015 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: 75% of students scoring 75% 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. Employ the various analytical techniques used in decision-making when designing, managing, and improving a supply chain that is competitive, timely and cost-effective while maintaining the service level customers demand.

#### Assessment 1

Assessment Tool: Departmental exam. Assessment Date: Winter 2015 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: 75% of students scoring 75% or better

Who will score and analyze the data: Exam will be online with scoring done by computer. Lead instructor will analyze the data.

## Course Objectives

1. Identify various supply chain designs, their alignment with business models, current trends, and the complexities associated with the physical movement of goods and how they affect the mission of the firm.

#### Matched Outcomes

2. Identify strategic and tactical issues related to supplier selection and the importance of creating and managing effective supplier relationships (e.g. supplier evaluation, certification, recognition, and negotiation).

## Matched Outcomes

3. Identify and analyze demand forecasting and logistics planning techniques (qualitative and quantitative) and the electronic tools that support forecasting, replenishment, production plans, and production scheduling.

#### Matched Outcomes

4. Identify inventory management concepts (inventory types, costs, investment) and the various inventory models and analytical techniques (economic order guantity/EOQ, guantity discount, economic manufacturing quantity/EMQ, and statistical reorder point).

## Matched Outcomes

5. Create and interpret process flow and control charts as they relate to the elements of leanproduction, just-in-time, and Six Sigma.

## Matched Outcomes

6. Identify the six transportation modes (carrier, rail, air, water, pipeline, and intermodal), the regulatory environments in which they operate, economic drivers, pricing strategies, and related documentation.

## Matched Outcomes

7. Recognize warehousing ownerships arrangements and their related economic and strategic benefits and challenges.

## Matched Outcomes

- 8. Apply various analytical techniques when making warehousing decisions, such as site selection, design, product-mix, layout, Warehouse Management Systems, and safety. Matched Outcomes
- 9. Identify and analyze the factors affecting the various materials handling considerations, such as packaging for materials handling efficiency, type of system to be used (mechanical, semi-automated, automated, information-directed), as well as special handling issues.

#### Matched Outcomes

10. Identify and evaluate the issues related to the development and management of both domestic and international supply chain and logistics relationships, such as risk, power, leadership, integration, and transparency.

#### Matched Outcomes

11. Identify, calculate, and analyze the operational and financial performance measures used along the supply chain.

## Matched Outcomes

12. Identify ethical and sustainability issues related to logistics and supply chain management. Matched Outcomes

# New Resources for Course

## Course Textbooks/Resources

## Textbooks

Bowersox, Closs, and Cooper. Supply Chain Logistics Management, 3 ed. McGraw-Hill Irwin, 2010, ISBN: 9780073377872.

## Manuals

Periodicals

#### Software

## Equipment/Facilities

Level III classroom

| <u>Reviewer</u>                 | Action             | <u>Date</u>  |
|---------------------------------|--------------------|--------------|
| Faculty Preparer:               |                    |              |
| Cheryl Byrne                    | Faculty Preparer   | Apr 30, 2013 |
| Department Chair/Area Director: |                    |              |
| Colette Young                   | Recommend Approval | May 08, 2013 |
| Dean:                           |                    |              |

| Rosemary Wilson                 | Recommend Approval | Jun 10, 2013 |
|---------------------------------|--------------------|--------------|
| Vice President for Instruction: |                    |              |
| Bill Abernethy                  | Approve            | Jul 30, 2013 |