COURSE OUTLINE

Course Number	Course Title	Credits
BUS 244	**Introduction to Supply Chain Management**	**3**

Hours: lecture/Lab/Other	Pre-requisites:	Implementation sem/year
3 Lecture	ENG101, MAT108 or advisor approved equivalent IST101 or IST102 or CIS175 ACC106 (or ACC111) ACC205 (or ACC112)	Spring 2013

Catalog description: A survey course designed to introduce students to the integrated activities of the supply chain, with emphasis on the flow of products, information, cash, and demand. Special topics such as the global dimension, the role of technology and strategic challenges will also be covered.

Required texts/other materials:

See Bookstore for latest edition

Revision date:

Spring 2019

Course coordinator:

Laura Sosa, 609-570-3475, sosal@mccc.edu

Information resources:

Textbook
SCM Trade websites and Journals
Guest Speakers

Other learning resources: NA

Course Competencies/Goals:

The student will be able to:

1. Define the term "supply chain" from a current and historical perspective and explain the role and relationship of each key activity [GE Goal 1; Core Skill A and B]
2. Analyze the value added role of logistics on both a micro and macro level including calculation of its costs [GE Goal 2 and 4; Core Skill A, B, D, E]
3. Discuss the complexity and importance of the global supply chain network [GE Goal 1, 8, 9; Core skill A, B, G].
4. Identify key performance metrics and analyze the financial implications of supply chain decisions [GE Goal 1, 2, 4; Core Skills A, B, D, E]
5. Explain the role of information technology in supply chain management [GE Goal 1; Core Skills A, B, D]
6. Appreciate the analytical tools utilized in demand planning and management [GE Goals 1, 2, 4; Core skills A, B, D, E]
7. Describe the relationship between order management and customer service and calculate the profitability and cash flow implications. [GE Goals 1, 2,4; Core Skills A, B, D, E]
8. Distinguish between commonly used approaches to inventory management with calculation of key metrics. [GE Goals 1, 2, 4; Core Skills A, B, D, E]
9. Identify the activities and performance metrics involved in transportation and distribution methods [GE Goal 1; Core Skills A, B]

Course-specific General Education Knowledge Goals and Core Skills. [

General Education Knowledge Goals

Goal 1. Communication. Students will communicate effectively in both speech and writing.
Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
Goal 8. Diversity. Students will understand the importance of a global perspective and culturally diverse peoples.
Goal 9. Ethical Reasoning and Action. Students will understand ethical issues and situations.

MCCC Core Skills

Goal A. Written and Oral Communication in English. Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.
Goal B. Critical Thinking and Problem-solving. Students will use critical thinking and problem solving skills in analyzing information.
Goal C. Ethical Decision-Making. Students will recognize, analyze and assess ethical issues and situations.
Goal D. Information Literacy. Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.
Goal E. Computer Literacy. Students will use computers to access, analyze or present information, solve problems, and communicate with others.
Goal G. Intra-Cultural and Inter-Cultural Responsibility. Students will demonstrate an awareness of the responsibilities of intelligent citizenship in a diverse and pluralistic society, and will demonstrate cultural, global, and environmental awareness.

Units of study in detail.

Unit I Overview of Supply Chain Management

L*earning Objectives*

The student will be able to…

- Define the term Supply Chain Management (SCM) **[Core Comp #1]**
- Explain the flow of products, information, cash, and demand in the supply chain **[Core Comp #1]**
- Explain the role and importance of functional areas (e.g. suppliers, distributors, marketing, order processing, etc.) in the supply chain **[Core Comp #1]**
- Explain the history of SCM and list the major factors that have led to the evolution of the definition. **[Core Comp #1]**
- Define logistics and explain its value added in SCM [**Core Comp #2]**
- Identify the major logistics activities [**Core Comp #2]**
- Define both simple and complex logistics channels [**Core Comp #2]**
- Analyze logistics from both a macro and micro perspective in the economy [**Core Comp #2]**
- Discuss the strategic role of logistics systems using cost analysis **[Core Comp #2]**
- Define globalization and understand its impact on the supply chain **[Core Comp #3]**
- Present a flow of the global supply chain and identify its complexities and unique issues [**Core Comp #3]**
- Explain global transportation options [**Core Comp #3]**

Unit II Strategic Factors

Learning Objectives

The student will be able to…

- Distinguish between vertical and horizontal relationships and explain their importance **[Core Comp#4]**
- Define Third Party logistics [**Core Comp #4]**
- Explain the characteristics of good performance metrics **[Core Comp #4]**
- Identify performance metrics for quality, time, cost and process [**Core Comp #4]**
- Calculate revenue impacts given different cost savings **[Core Comp #4]**
- Calculate (using spreadsheet analysis) the impact of SC decisions on key financial indicators (e.g. ROA) and statements [**Core Comp #4**]
- Explain the strategic importance of information [**Core Comp #5]**
- Explain the requirements of a SCM information system and technological challenges **[Core Comp #5]**
- Identify commonly used software supporting information systems. **[Core Comp #5]**

Unit III Demand to Customer Service

Learning Objectives

The student will be able to…

- Define demand management and explain its strategic importance and link to business strategies. [**Core Comp C#6]**
- Simulate demand forecasts using mathematical approaches such as moving

averages various. **[Core Comp #6]**

- Explain factors influencing forecasting and sources of errors [**Core Comp #6]**
- Interpret forecast errors **[Core Comp #6]**
- Define the Collaborative Planning, Forecasting and Replenishment (CPFR) business model and explain its strategic importance [**Core Comp #6]**
- Explain alternative channels of distribution **[Core Comp #6]**
- Explain the relationship between order management and customer service **[Core Comp#7]**
- Define Customer Relationship Management and its major steps **[Core Comp #7]**
- Demonstrate how Activity Based Costing can be used to increase profitability **[Core Comp #7]**
- Identify the steps in the Order to Cash and Replenishment cycles **[Core Comp #7]**
- Identify measurements of Order Management and Customer Service **[Core Comp #7]**
- Calculate the cost of stockouts **[Core Comp #7]**
- Calculate cash flow loss due to order fill rate **[Core Comp #7]**

Unit IV **Inventory Management**

Learning Objectives

The student will be able to…

- Explain the rationale and costs of holding inventory [**Core Comp #8]**
- Calculate Inventory Carrying Costs **[Core Comp #8]**
- Compare stockout costs to carrying costs **[Core Comp #8]**
- Compare alternative approaches to managing inventory [**Core comp #8]**
- Calculate the re-order point using a simple Economic Order Quantity model (EOQ) and discuss the statistical treatment of uncertainty**. [Core Comp #8]**
- Graphically evaluate the EOQ model to inventory management [**Core Comp #8]**
- Explain the Just In Time approach to inventory **[Core Comp #8]**
- Explain the concept of Materials Requirements Planning (MRP) [**Core Comp #8]**
- Identify commonly used methods of classifying inventory [**Core Comp #8]**

Unit V **Transportation Management**

Learning Objectives

The student will be able to…

- Explain the role of transportation in SCM [**Core Comp #9]**
- Compare various modes of transportation and explain how a selection should be made **[Core Comp #9]**
- Explain the benefits of intermodal transportation [**Core Comp #9]**
- Explain alternative terms of sale in both domestic and international transactions **[Core Comp #9]**
- Define different types of freight documentation **[Core Comp #9]**
- Identify transportation metrics **[Core Comp #9]**
- Explain the importance of Transportation Management Systems **[Core Comp #9]**
- Identify key pieces of legislation regulating the Transportation Industry **[Core Comp #9]**

Unit VI Distribution Management

Learning Objectives

The student will be able to…

- Explain the importance of Distribution in SCM **[Core Comp #9]**
- Explain the considerations involved in Distribution decisions and the cost tradeoffs **[Core Comp #9]**
- Identify the processes involved in Distribution **[Core Comp #9]**
- Identify key metrics of a Distribution network [**Core Comp #9]**

Evaluation of Student Learning.

Achievement of the course competencies will be evaluated through the use of the following tools:

- Multiple choice exams assessing students' application of key terminology and practices in SCM. (Core Com# 1-9)
- Individual and group projects (including casework) enforcing the use of data base management and spreadsheets in calculation and analysis. (Core Comp # 2, 4, 7, 8)

Final Grades will be assessed based upon:

Exam #1 – Units I and II - 20%
Exam #2 – Unit III – 20%
Exam #3 – Unit IV – 20%
Exam #4 – Units V and VI – 20%
HW/Casework – 20%

Academic Integrity Statement:

Mercer County Community College is committed to Academic Integrity -- the honest, fair and continuing pursuit of knowledge, free from fraud or deception. This implies that students are expected to be responsible for their own work, and that faculty and academic support services staff members will take reasonable precautions to prevent the opportunity for academic dishonesty.

The college recognizes the following general categories of violations of Academic Integrity, with representative examples of each. Academic Integrity is violated whenever a student:

A. Uses or obtains unauthorized assistance in any academic work.

• copying from another student's exam.
• using notes, books, electronic devices or other aids of any kind during an exam when prohibited.

• stealing an exam or possessing a stolen copy of an exam.

B. Gives fraudulent assistance to another student.
• completing a graded academic activity or taking an exam for someone else.
• giving answers to or sharing answers with another student before, during or after an exam or other graded academic activity.
• sharing answers during an exam by using a system of signals.

C. Knowingly represents the work of others as his/her own, or represents previously completed academic work as current.
• submitting a paper or other academic work for credit which includes words, ideas, data or creative work of others without acknowledging the source.
• using another author's words without enclosing them in quotation marks, without paraphrasing them or without citing the source appropriately.
• presenting another individual's work as one's own.
• submitting the same paper or academic assignment to another class without the permission of the instructor.
• falsifying bibliographic entries.
• submitting any academic assignment which contains falsified or fabricated data or results.

D. Inappropriately or unethically uses technological means to gain academic advantage.
• inappropriately or unethically acquiring material via the Internet or by any other means.
• using any electronic or hidden devices for communication during an exam.
Each instructor and academic support service area is authorized to establish specific guidelines consistent with this policy.

Consequences for Violations of Academic Integrity
For a single violation, the faculty member will determine the course of action to be followed. This may include assigning a lower grade on the assignment, assigning a lower final course grade, failing the student in the course, or other penalty appropriate to the violation. In all cases, the instructor shall notify the Chair of the Academic Integrity Committee of the violation and the penalty imposed.
When two (or more) violations of academic integrity are reported on a student, the Academic Integrity Committee (AIC) may impose disciplinary penalties beyond those imposed by the course instructors. The student shall have the right to a hearing before the AIC or a designated AIC subcommittee.

Appeals
The student has a right to appeal the decision of the instructor or the Academic Integrity Committee. Judicial procedures governing violations of Academic Integrity are contained in the Student Handbook.